Nation's Business



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THE ALCHEMIST

transmuting metals to the women they married. In search of this has accomplished the dream. His art has drawn gold from waste priceless formula the alchemist labored mightily, hoping by means of and speeded up the sluggish processes of nature for the benefit strange mixtures and weird incantations to change base metals into

They said in the Dark Ages that fallen angels taught the art of gold. He failed; but his direct descendant, the industrial chemist, of mankind.



The Moment You Realize

That the time has gone by in our industrial and commercial evolution when any business enterprise lives unto itself alone—

That Business Men are interdependent and must act as a unit, just as Agriculture and Labor act as units—

That many of America's business problems, once local, have become national in character and need national treatment—that

The Chamber of Commerce of the United States is the Voice of American Business—

That it is the greatest single coordinative force in the whole history of American industry and commerce—

That it has done more in four years toward coordinating the business forces of this country than has ever been done in any other country at any time—

That it represents not one community nor one business interest, but ALL communities and ALL business interests—

That it is doing more for you and your business than you could ever hope to do single-handed—that it is

Contending For What You Want to See In This Whole Country

BUSINESS UNDERSTANDING, INTEGRITY, STABILITY, SANITY

The moment you realize all this—you will write at once to the Chamber of Commerce of the United States, Riggs Building, Washington, D. C., for an Individual Membership.





Skylines of American Cities-New Orleans

LEADING ARTICLES IN THIS ISSUE

The Modern Alchemist	ign
A Shopping Question. Verse . STRICKLAND GILLILAN . Back Conditions by John Howard	ver
Speeding Up Mother Nature	3
The Ubiquitous Comprador	7
The Commercial Club in the Back Country Bristow Adams	11
A Clinic on the Railroad Situation	14
The Birth of a New Profession	18
Concerning Wheat James M. Binkley	20
The American Indian Speaks	24
Men You Know—and Don't! James B. Morrow	26
The New Romance of Shipping George Weiss	29
Mr. Commercial Attaché: Representing Uncle Sam	34
Must Opportunity Break in the Russian Door?	37
Commerce in the Month's News	42
The Legislative Program as Regards Business	45
Analyzing the Railroad Question	46
From the Editor's Mail	48

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Applying Education to Business

EDUCATION is to the fore. Belligerent countries do not abate their devotion to education: on the contrary, they seek all possible means of improvement, for they realize that in the years that follow a peace of arms there will be commercial and industrial rivalry in which character, skill, and knowledge will determine success.

The United States is founded on education. The first settlers upon the Atlantic coast had scarcely provided for their immediate wants when they looked to their facilities for education. The school house was well in the van as settlement proceeded westward and to-day continues to be our most characteristic institution.

Twenty-five million children are in our schools and each year we pay for the salaries of teachers in public schools more than three hundred million dollars. Our colleges and technical schools have more than a hundred million to spend annually.

American civilization is the result. In the world of business American education has had very concrete effects.

During the last fifty years Americans have made two-thirds of the great inventions of the world. Each important invention has founded an industry. A mere enumeration of a few is significant of the achievement,—the telephone, the incandescent lamp, the trolley car, high-speed steel.

American education has been adaptable. It has changed to meet the peculiar needs of a nation's development. It has become an integral part of agriculture. It now bids fair to become as much a part of American industry as raw materials.

In the past when American training and skill had produced the carbon-filament incandescent lamp, and foreign skill obtained the ascendent by devising a tungsten lamp, American resource won back its prestige by making a wire-drawn filament and a nitrogen-filled lamp.

The future will be no less replete with achievement. The only question is how far American education can extend its adaptability.

The Nation's Business

VOLUME 4, NUMBER 12

"A Magazine for

Business Men

WASHINGTON, DEC., 1916

SPEEDING UP MOTHER NATURE

The Wizard of American Wand and Brings Forth a

Business, the Chemist Waves his National Industry from a Scrap Heap

OETS of former days have taken their inspiration from Mother Nature, for she is good and bountiful. But she is too bountiful; and to produce a tree she scatters a thousand seeds; to produce the finny tribes of the sea her largess of fish eggs runs into the trillions. She has to provide for losses; fish roe is a delicacy not only to other fish, but to man, in the form of caviar. When the fish hatch there are thousands of enemies, so that the proportion which attains to maturity represents what some folks would call a very "long shot".

Furthermore, Nature has all the time there is, so she has no need for undue haste. Not so with man! Man's time is limited, and he is in a

hurry. So he has called on the industrial chemist and has said to him:

"Give me new processes that will cut down the time and costs of production. Find me ways that will improve the product. Improve on Nature's ways, and at the same time improve on Nature's results, for I shall not be satisfied with 'something just as good'; it has got to be better. But further, and above all, cut out the wastes. Production has come to such a point in these days that all the profits are in the wastes. If there is much waste there is money loss; the gain depends on the profitable utilization of these wastes in the form of by-products."

KNOWING the task, the chemist has set to work. One of his minor tasks, by way of illustration, was to reproduce the famous "purple of Tyre".

When lords of ancient times walked forth for the plaudits or the daggers of their dependents, their royal persons were clothed in robes of Tyrian dye. That the so-called purple of that day would be now designated a red, is

fancy lightly turns. There was nothing of the sort in present-day glass-making. To the laboratory with that problem!

And the answer is the famous favrile glass, which anybody
may own without being either a Pharaoh or a mummy.

With corn as a raw material, the chemist has created many an important industry. Every year 50,000,000 bushels of American corn disappear through transformations under chemists' directions. Our chemists and their plants are unquestionably world-leaders in this important branch of commerce.

quite beside the mark. It was the badge of rank,—the royal raiment which has given rise to our figure of speech, "born to the purple". Slaves went out to the beaches and there gathered small shell-fish, which were none too plentiful, and from these the dye was extracted. There was no conservation movement in those days to save the shell-fish from extinction, and slaves have long since gone out of style.

Yet Fashion demanded a return to the Tyrian dye; and when milady imperiously orders the regal color she is bound to have it. The manufacturer just dotes on supplying a Demand; in fact, that is what he lives on. So he passes the word to the chemist, who is barred the use of the slaves or the mollusk. But after a session with test tubes, retorts, and crucibles he emerges from the laboratory with the formula, and anybody who has the price can stroll down the avenue under the imperial colors. So much for the laboratory and democracy!

WHEN archeologists of the present day dug into the tombs of the Ptolemys, they found shards of glass which bore an iridescent sheen outrivalling that on the tail of the peacock, or that brighter lustre which gleams upon the burnished dove, when in the spring a young man's fancy lightly turns. There was nothing of the sort in present-day glass-making. To the laboratory with that problem! And the answer is the famous favrile glass, which anybody may own without being either a Pharaoh or a mummy.

HARRIS

EWING

This plant is going to help free the American woman from the necessity of depending on German dyes for the added glory of her raiment. It is that of the Benzol Products Company at Marcus Hook, Pa., which is to manufacture aniline on a big scale.



the mere demands of fancy. The modern industrial chemist is the magician of the business world to-day.

What began in the futile alchemy of the middle ages, with its aim toward the transmutation of baser metals into gold, has left the realm of Black Art and come out into enlightened day, with a figurative transmutation of many kinds of dross into real money. The scientist in his laboratory may find the culmination of his research in the smear on the glass slide under his microscope, or in the cloudy mixture at the base of a cotton-plugged test tube. Yet the pin-head smear may be the germ of a vast new industry.

THESE technical visionaries, or visionary technicians, I are the seers of the times. Demand is their master and they struggle to serve him. Just now they are struggling to produce more gasoline by "cracking" crude oil residues, and they are hunting for gasoline substitutes. Some of them already see a possible solution of two problems at once, wherein the distilleries, which lose their business through the workings of anti-liquor laws, may still prove profitable through the production of industrial alcohol. Already the laboratories have demonstrated that even the wastes of lumbering can be turned into liquid motor fuels.

Chemists are burning the midnight kilowatt in the formulation of a dyestuff industry which will make America independent of the rest of the world; and the best of it is that these dyes are going to come largely from substances which heretofore have been allowed to go to waste, or worse still have polluted our earth, air, and water. They are hard at work to increase our paper product and to lessen the cost of production.

The waste pile, the scrap heap, the culm dumps, the ashes and refuse; these are their hunting grounds.

"Let us not leave these unsightly things as sores on the face of Mother Nature; let's remove the blemish and make something good and useful in its stead."

DUT it used to be cheaper and easier to let the slag run Dits way, and to let the smoke, and ash, and gas make

the surrounding world a harder rather than an easier place for man to inhabit. In those days the work of the chemist not only was in little demand, it was in but little repute. Things were done by rule of thumb, in a hit-ormiss style, with the misses about as frequent as the hits. Even yet the trained scientist has not come into his own, and it looks as if the lumberman, for example, will come to the very verge of a timber famine before he will be converted to the need of the technical forester. So it was, that when the chemist entered the industrial field, his precise methods were not received with the welcome they deserved.

However, he has won his way. Sometimes he had to meet the hostility of the business staff, which openly ridiculed his array of apparatus; sometimes the opposition went so far that improvements suggested by him were deliberately made into failures by the workmen.

"Do you suppose," demands the foreman of a soap factory, "that I'm going to let a cock-sure college kid from Cornell come in here and tell me how to handle the kettles I've been working at all my life, and my father before me, and his father before him! I guess I ought to know my business!" But the trouble was that he really did not know any more than had been known for a long while back, and the time had come to start something, if the firm was to keep in a field of considerable competition.

LVERYWHERE one looks, the man who has devoted himself to investigative work is in growing demand, and the triumphs of pure and applied research have left the romances of the Arabian Nights, with their afrits and genii, far behind. Just at random, take the wine industry, dependent on many whims of Mother Nature in the growing of the grape. The entomologist got at the bug that was destroying the roots, and the plant breeder developed a stock too tough for the insect; the plant physiologist found out the kind of food that the grape needed, and the chemist concocted the fertilizer formula that would furnish it in the right proportion. These scientists put the "win" in winery and took the "owe" out of grower. The production of this debated and debatable commodity became very largely independent of good or bad "seasons"—all through the ministrations of the scientist, though he couldn't make the industry independent of politics.

Speaking of grapes, there's the raisin industry in the vicinity of Fresno, and thereabouts! The size of the in

dustry is attested by the fact that it was a considerable problem to burn up thousands of tons of raisin seeds. A chemist tackled the problem and found tannin. "Mr. Raisin Grower, allow me to introduce Mr. Leather Manufacturer". The rest was easy. Everybody who bites a grape seed gets the "puckery" effect of this tannin; but now the tanner gets the effect where it is of some use, and the raisin grower feels the effect where it does him a lot of good—in his pocket.

Going into this grape business a little further, it was perfectly possible for California to grow the famous grapes of the Old World, such as the Malaga. The bulk of the grape-eating public is somewhere in the neighborhood of the Appalachian Mountains. But the California grape couldn't get east cheaply and compete with those from the Mediterranean countries, for these countries had another product,—ground cork, a waste product from the cork oaks of Spain, Portugal, France, and Algeria. Here again the scientist stepped in. He took another California product, and a wasted one at that, and he subjected it to humidity tests, to tests of susceptibility to bacterial infection and found it proof against a number of things that might do a lot of harm. Result: California table grapes are now to be had anywhere in perfect condition, packed in redwood sawdust.

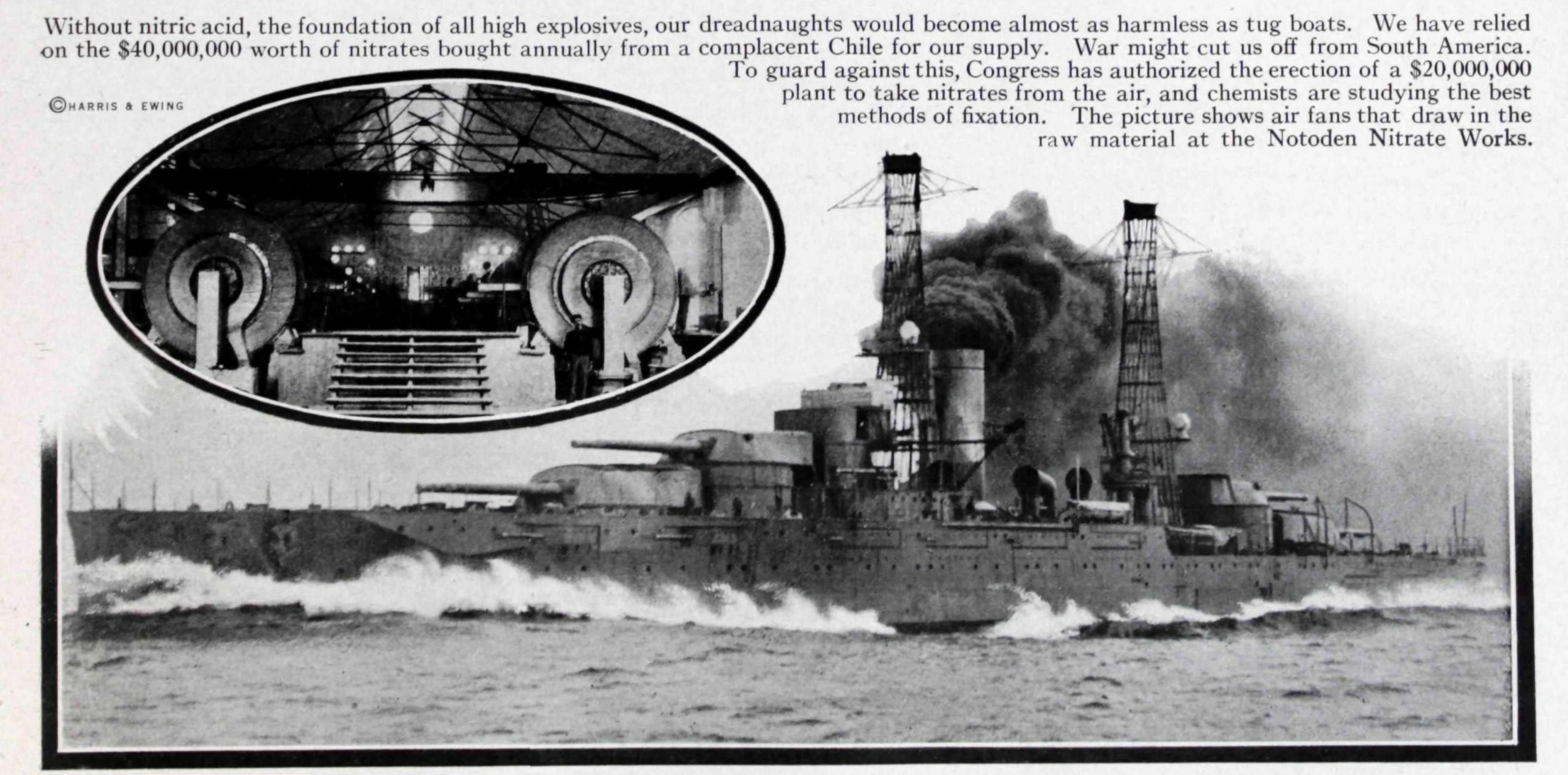
THIS illustrates the whole trouble in a discussion of this kind! One thing leads to another. For example: through the work of a scientist, we are now growing cork oaks in Florida, after many trials and failures. Through the work of chemists, the things that are being made from sawdust would appal one with a mere enumeration,—explosives, linoleum, plaster and plaster boards, and various chemicals and distillates. If one were to tell what has been made from wood waste it would more than fill this magazine. The latest is that waste tanbark from which all the tannin has been extracted, has found a higher place than underfoot in the horse-show ring; it's up on the roof now, supplementing and partially replacing the expensive rag stock in tarred felt roofing. Some of it

is going into wall paper, and some into pipe conduits. And these new ideas were developed in the laboratory.

There is no use trying to particularize in this brief account of the relation of the chemist and industry. One can merely hint at the high-lights and give no more than suggestive instances. In spite of all that has been done, an immense amount still remains to be done. The pressure the war has put upon us, has meant marvellous strides in America, and the past two years have seen a new and serious purpose in chemical research.

The present high price of cotton, for example, is largely due to war's demands. Cotton used to go mainly into cloth; now a large part of it gets into explosives, as guncotton. The cotton seed, once a despised nuisance, is now a principal source of revenue, and adds millions to the value of the crop. Cottonseed oil, refined, bleached, deodorized, and otherwise manipulated by the chemist, goes everywhere. At first the hulls went back on the fields, to partially restore the fertility which the plant had taken out of the soil. Then the oil was extracted, but wastefully. The hulls were burned; later the ashes were used for the manufacture of potash. Now they are one of the best ingredients in a balanced ration for cattle. Here again a mere tabulation must suffice for the byproducts of the once-hated seeds—salad oil, soap, glycerine, paint, roofing tar, a cooking fat that equals lard and is preferred by many a housewife, and a nutritious cattle feed from the formerly wasted hulls.

Something of what has been done with cotton seed, has been done with corn through the agency of the chemist. He has "cracked" the corn into a number of parts, but not in the sense that it has been broken up to feed animals and man. With microscope and distillation apparatus he has separated out sugars, syrups, and gums, starches, dextrins, and oils, glycerine, acids and salts. His work has given rise to the great industry represented by the Corn Products Refining Company. Right now chemists are indirectly at work on the problem of saving our spruce forests through the possible use of corn stalks for paper pulp. Some kinds of paper have already been produced,



though the processes have not as yet been commercially perfected.

A French chemist made the basic discovery which gave stability to the canning industry, and the theories of Pasteur have had a much broader commercial application than they have had in medicine, though we are likely to hear of them more in therapeutics than in economics.

PRACTICALLY all of the foregoing examples have been from the relation of the chemist to plants products. There is an even wider field in the realm of textiles. The making of dyes has been carried on for thousands of years, and wonderful results have been achieved by primitive peo-

ples. The wrappings of the mummies, with their rich and fresh colors, attest to the heights that had been reached by the dyers of that ancient day. The greatest advance in dyes came, however, in 1856 when Sir William Henry Perkins invented mauvine, which was the forerunner of the aniline dyes. Germany soon outstripped all other countries in the coal-tar dye industry, and when the war broke out the whole civilized world suffered through the loss of exports of this sort from Germany. The most valued cargo which the submersible "Deutschland" could bring over was one of dyestuffs, for use in textiles, in printing inks, in paints—anywhere that color was desired. These synthetic colors have greatly reduced, or have practically put an end to, the growing of indigo, madder, and other vegetable color sources.

The patient silkworm, and the equally patient Oriental, are facing serious competition from the chemical manufacture of synthetic silk. This artificial silk was evolved by the Count de Chardonnet, and was first exhibited in Paris in 1889. Now the annual product is some twenty million pounds. The chemist has taken the process of the spider rather than that of the silk worm. He has shown the manufacturer how to treat wood pulp with caustic lye and then to dissolve it in carbon disulphide; it is then diluted again with more caustic lye to form a sticky fluid which is forced out into viscous threads, almost exactly as the spider's gossamer comes from the spinnerets in a liquid form. These liquid threads are hardened by treatment with sulphuric acid, ammonium sulphate, and sodium borate, or formic acid. After it is washed and dried it is ready for use, so that nowadays even the impecunious may wear silken hosiery of the most shimmery kind.

Another textile, twisted woodpulp, is going into towels, rugs, cordage, wrapping twine, and into furniture that closely simulates that made of reeds or willow. Mattings and suit-cases which look like rattan are made of this same pulp, reduced by the chemist from the trees of the forest.

FAVORITE phrase of the reformer—"they do it so much better in Europe"—has been dinned in our ears until we are inclined to be petulantly resentful. Like naughty children, we are continually nagged by zealous friends who urge us to emulate the scientific and economic achievements of England, Germany and France.

Echo answers from those very countries, in words of the same sort from their equally zealous friends, "emulate the great deeds of America." Only a few weeks ago the Privy Council of Great Britain pointed out that the U. S. was doing more than any other country in industrial chemistry. And in Parliament assembled, America is further held up to

Britons, with the admonition: "Go thou and do likewise."
Viscount Haldane: Englishmen have been lacking in scientific direction of their abundant energy. To secure

this, training and education are essential.

Lord Bryce: The business community of England, unlike the business community of America, does not yet appreciate the important effects which scientific discovery and the application of science to their industries, might have

upon their business.

In the debate on technologic education, Viscount Haldane told the story of an American manufacturer of photographic supplies who wished to develop new scientific research. This manufacturer found a very capable expert in England; but no inducements could take this man from the British company which he was serving. Thereupon the American manufacturer bought out the whole British establishment, chemist and all, and now has him as head of his research laboratories in Rochester, New York.

WHEN we get into the work of the metallurgist, and the extractor of chemical resources from minerals, the field is without limit. When potash was suddenly cut off from Germany and there was no place else where the potash salts could be found we began to look about, and the laboratories got busy. Now there are companies commercially organized, and producing potash from the beds of giant kelp which cover the reefs off large sections of our Pacific coast. The nitrates of Chile were largely cut off from us because the commerce in them came mainly through Germany. Now we are extracting nitrogen from the air through electrical action, though

Sweden and Norway are still far ahead of us, because of their immense water-power development and cheap electric current. Cyanamid, a new fertilizer constituent from Utah, is coming in to take the place of those which the war has cut off, and the temporary stringency has probably proved a blessing in disguise, for it has led to a new "industrial preparedness," which is only another name for the conservation movement which galvanized American thought eight years ago. We now see, for example, what we were wasting in coal tar by-products, from which we have already begun to build a very respectable dye-stuff industry. Where we imported fustic wood for our yellow colors, we have found, through the laboratory, that we have an equally good base in our own Osage orange.

WE werewasting at least one-sixth of our mineral product, or nearly a million dollars for each working day in the year. Now, in an effort to make up for the loss of the "Made in Germany" on many a mineral product, we are in a fair way to greatly reduce this proportion of loss.

Aluminum alone furnishes a single startling example of what the industrial chemist has done. In the memory of many who are still young, there exists the recollection of marvellous tales of this new metal, with its unbelievable lightness. At first its use was limited; it could not be welded and could not be soldered. Therefore, said the theorists, it would always remain more or less of a curiosity. Yet, in the past ten years the increase in the use of aluminum in this country has been just about tenfold and from about 10 million pounds a year the consumption has gone to 100 million. It has become so common, even in ordinary household utensils, that its use no longer causes comment. It can be welded and soldered, thanks to the research of the scientist, and it is serving a great many uses in large tanks, cooking vats, and other vessels used by brewers, preserve manufacturers, and fat recoverers, where a metal that will conduct heat, will not corrode, and is non-poisonous, is (Concluded on page 13)

THE UBIQUITOUS A Far-Eastern Institution that the American Exporter Who COMPRADOR Has an Eye on China Must Reckon With

By F. S. TISDALE

In the olden days the Chinese merchant gave this advice: "My son, beware of the Foreign Devil. Sell him anything—but buy nothing in return.

Thus shall you prosper."

The modern Chinese merchant sings a different tune. It is: "My son, cultivate the foreigner. Sell him anything and buy anything from him. For he is as a

child when it comes to business and in every deal wherein he is concerned there is great gain for thee."

It is the ambition of practically every young Chinese in the treaty ports to become connected with one of the great foreign firms. Ask any one of them

what particular position he would like best to occupy, his answer will be loud and fervent.

"I'd like to be comprador," he

will tell you.

If you do not know what a comprador is you would have to learn if you ever entered the Chinese trade. He is the Chinese

manager of the hong, or busines. In that capacity he personifies the fate of your business. He is bank-

ruptcy, or fortune, according to his acumen, and, sometimes, according to his inclination. He is the point of contact, the bridge, between the business ways of the West and those of the ancient East.

The word comprador came to China with the Portuguese. It is a descendant of the Latin comparare, which means to procure. Though the position of the comprador has changed greatly with the centuries he still procures—he procures fat commissions and slenderer kumshaws from the imports flowing into China through his firm and through the exports flowing out of it by the same route. Originally the comprador was the servant of the firm which hired him. In that capacity he acted as interpreter and go-between in his master's dealings with the natives. Around Canton the name is still

applied to the native head stewards of foreign households and to the head stewards of ships.

The comprador today is a vastly different person from his lowly predecessor. Instead of being the servant

of the hong employing him, he is the master. His word is final in all things affecting trade with the Chinese. Usually he comes from the class of Cantonese who are to be found in all ports of the Far East—and are men

of wealth wherever you find them. In most cases the comprador is so wealthy that he cannot count the lacs of his fortune on the fingers of one hand. Often his fingers would give out and his toes enlisted if he were computing the value of his worldly goods. And be it known that your Chinese scorns to count his successes in small coins as does the Westerner.

A lac is one hundred thousand dollars or taels as the case may be.

It is not unusual to find compradors who would be able to buy out the taipans, or foreign managers, of their firms without having to call in any of their loans.

The day may come when the foreign importer and exporter in China will be

able to get along without the comprador. But the

day is so far distant that the best prophets of the Far Eastern business situation are unable to make out its approach.

ent, and on occasion can paint a landscape.

to make out its approach.

A manufacturer of safety razors on a visit to Shanghai last summer went around to the United States Consulate General to see if there were any overlooked possibilities for his product among China's four hundred millions. He inquired as to what was necessary to tap this vast

"Two things," said the attache holding up that many fingers. "The first is to get a comprador, and the second is to get a good comprador."

his firm and through the exports flowing out of it by the same route. Originally the comprador was the servant of the firm which hired him. In that capacity he acted as interpreter and go-between in his master's dealings with the natives. Around Canton the name is still the Chinese language to take the comprador's place.



O UNDERWOOD & UNDERWOOD

The indispensable link between you and the trade of China. He knows the classics, can write a poem, play on a rasping oriental instrument, and on occasion can paint a landscape.

trade.

"You could—if," said the attache with the loud pedal on the last word.

An enumeration of the "ifs" convinced the prospective exporter as to the usefulness of the comprador. It was shown that the institution owed its existence to a far more profound reason than the reluctance of the foreign business man to learn the Chinese language. After learning the Chinese language, the foreigner would have to learn all the intricate ins and outs of Chinese

trade methods. And the time it would require a foreigner to master these things is put in round numbers at one thousand years. Since the Chinese have been doing business in their own way since the days when our ancestors were hacking at each other with stone hatchets, there is little chance that they are going to change overnight and take up the ways of such an infant among nations as the United States. You must either do business their way, or not do it at all.

"No foreigner," they say in Shanghai, "ever gets the better of a Chinese merchant."

The statement is easily understood when you consider how a Chinese business man is trained. Business colleges do not flourish in China. They do not flourish for the same reason that there are no classes in swim-

ming for the ducks that navigate the canals. If the father of a Chinese boy is a merchant, the boy spends most of his life in the shop from the crawling age to the walking stick period. He learns business from that most prominent of old-fashioned teachers, Experience. The Chinese do not change their methods because the merchants who have grown ancient and wise in the trade hand down their axioms and customs to the coming generation.

Bret Harte and others who have wondered at the deep and devious ways of the Eastern mind have in no wise overrated their subject. When these minds apply themselves to business as their one absorbing pastime and passion—there is nothing for the awed foreigner to do but marvel and take unto himself a comprador.

The comprador usually furnishes a bond to insure the faithful performance of his duties. There are no credit publications in China. The comprador becomes the walking Dun and Bradstreet of the hong. Besides he is a complete encyclopoedia for any sort of information concerning the trade of his country and how it is conducted. He saves his firm from dealing with bland and prosperous

looking merchants who could not be trusted for the value of the silk they have on their backs. The comprador can tell you how to get a shipment by rail, river, canal, camel and cart into the vague country along the border of Turkestan. Besides this he keeps a finger on the pulse of the always feverish political conditions in his country. He can tell in what particular part of Yunnan the next outbreak is to flare up and warns his *hong* against sending shipments to the infected district to tempt the erratic

consciences of the soldierbrigands. In introducing Chinese merchants who trade with his hong he becomes responsible for them and can be held for losses that may come through dealings with his proteges.

It is also the comprador who guards the sacred *chop* of the office. The chop is the seal or stamp bearing the Chinese name of the foreign firm and it is as good in all business transactions as the signature of the president. From this it can be easily seen that the chop is a thing of danger and dynamite. There have been repeated lawsuits in the mixed courts over the use of firm chops by compradors in their personal deals. In defense of this practice the compradors say that they become known throughout China by the names of their firms. For instance, a trader in the interior would know



O UNDERWOOD & UNDERWOOD

Fishing with cormorants is an ancient practice still followed among the Chinese and Japanese and lately revived as a sport in Great Britain. These birds, taken from the nest when young and easily trained, make a living for many families on the China coast. Cormorants pursue their prey by swimming and diving, using their wings in progress under water, and sometimes descending to great depth. A collar is fastened about their necks, so that no fish can be swallowed, but only pouched. While the cormorant is trying desperately to get the fish past the ring, the fisherman takes it away sending the crestfallen cormorant back to his job.

a comprador in a treaty port as "Mr. Consolidated Skin and Hide Company." So the compradors aver that they must use the name in their own transactions as it is the one by which they are recognized throughout the celestial republic.

In payment for their services the compradors get commissions that vary with each deal. Sometimes their kumshaws come from both buyer and seller. Each comprador has his shroff who collects accounts, does a petty cash business and passes on all the specie that comes into the office. The typical comprador is a venerable gentleman who wears spectacles with horn rims and who is in private life a connoisseur of his country's art. Like every Chinese of good education, he knows something of the interminable classics. Betimes he writes a little poetry, plays a bit on rasping Oriental instruments and can paint a creditable landscape.

The *shroff* is a younger man who hopes to be all of the above things himself some day. Between the two of them they fill the office positions with near and distant relatives. The foreigner can never tell what this horde of

help is good for, but, as the wages amount to nothing when compared to Western standards, he lets the comprador have his way.

To any one who has been in China, there are three sounds which associate themselves with the memories of the comprador's office. They are the continuous buzz of rapid conversation at which also the Chinese surpass all other races; the sibilant noises that go with the tea drinking; and the sharp, insistent notes that come from the shroff's desk as he tests the Mexican dollars.

There is so much counterfeiting in China that every coin is presumed to be guilty until it proves itself innocent. The shroff takes a pile of dollars in his long, delicate fingers and runs them swiftly from one hand to the other. In the passing, the suspects are rung against the vindicated coins, and the pitch of their voices tells the keen ears of the shroff whether there are scooped-out or spurious pieces in the lot. They all do it the same way. The tune of it goes thus:

"Ding, dingclick. Ding, ding —click." that go to the comprador. illegitimate use of his power. He is, of course, a member of every guild that will do him any good and he will obey the dictates of this order above the commands of his house. There is also the constant temptation to use his position for private or revenge. gain They tell of the

O UNDERWOOD & UNDERWOOD Transportation problems in America are bad enough, yet these puzzles are nothing compared with what the business man must contend with when he enters the Chinese market. China has no comprehensive systems of railways or even roads. Going inland, shipments often travel by steamer, canal boat, wheelbarrow, railway, cart, camel and manback.

The "ding" is the ringing sound that tells him whether or not the dollar is counterfeit, and the "click" is made by the acquitted coin as it takes a place among its honest fellows. From these offices the foreigner woos the idiosyncrasies of Chinese trade. One of the outstanding successes in China is a brand of pills manufactured in America. They are sold in China by the ton. In the United States the little pellets won their success by appealing to people who were "run-down, yellow and anaemic." It was obvious when the company decided to enter the Eastern field that some other point would have to be made.

"Because," as the manager remarked, "every Chinese looks yellow, run-down and anaemic."

It was the concern's good fortune to get a shrewd old comprador. He knew his people. Ignoring the fact that the pills were a cure for yellow complexions, he emphasized that they were compounded by the wise foreign doctors. He made capital out of the growing distrust of the so-called physicians of his native land and the consequent demand for foreign remedies. It was not possible for all Chinese to have the luxury of foreign doctors at their bedsides when they were ill, but only ignorance or superstition could prevent their having these powerful foreign pills. The argument prevailed. Today those pills are known and taken wherever Chinese suffer—or think they suffer—and the complacent foreign heads of the hong don't begrudge a penny of the fat commissions

It must be admitted that the comprador may make



O UNDERWOOD & UNDERWOOD

Bamboo to the average American spells fishing-pole but the Chinese build houses with it, use it for all scaffolding purposes, and transport all goods by means of it, from the smallest market produce to a grand piano in a foreign settlement. In early life bamboo is used for food, the young shoots being eaten like asparagus or pickled in vinegar. When full grown it supplies the vast water population with masts, and from it are made water vessels, chop-sticks, pipes, umbrellas, hats, nets, table stools, fishing rods, and musical instruments. Between forty and sixty varieties of bamboo are said to be known to the Chinese.

comprador of a bank who became offended at the comprador of another bank. To get even, the offended one waited until after closing hours on Saturday afternoon. Then he skilfully spread rumors that the bank represented by his enemy had gone to the wall and would not reopen on Monday. The exchange shops were allowed to get word of the alleged failure and the news was whispered about the city by adroit agents. As a result the bank notes of the institution attacked depreciated in value so that by opening time Monday morning frightened coolies could only get \$4.50 for a \$5 note. The result was a short run on the bank which was easily met. But the offended comprador had accomplished his revenge and in addition made a neat profit out of buying up the notes below cost and cashing them at their face value.

But it would not do to say that the abuse of power is general; doubtless it exists in no greater or lesser degree than in other countries.

Each comprador operates in a different manner. Your Chinese wherever you find him is strictly an individualist and the methods of each man differ from his associate's according to his particular genius. Therefore no cut-and-dried rules of procedure have ever been set down concerning the way the comprador goes about his work.

An instance may be made of the comprador of a big foreign bank. The foreign "No. 1" of this bank would not think of advancing money to a Chinese without first consulting his comprador. The prospective borrower might produce securities that appeared to be as solid as silver shoes, but it would take the insight of the comprador and the information that he commands as a member of his guild to say the final word.

That is not the only phase of usefulness the comprador fills. He is a source of fresh revenue for his bank. His life is a continuous round of banquets, theater parties and tea house conferences, every one of which has a business motif hidden away in it somewhere. The good comprador is constantly introducing new depositors and gathering new business in this way—and on every cent of this he gets his commission. In separate deals the bank principal usually sets a figure with which the bank will be satisfied. The comprador is entitled to everything he can obtain beyond that by means of the dickering and bargaining so dear to the heart of every Chinese.

Speaking of the cotton trade in China, Mr. Ralph M. Odell, Commercial Agent for the Department of Commerce, pays tribute to the commanding position occupied by the comprador, recalling the fact that all big deals are made through him or through the sources he can command.

"The comprador," he says, "has his own organization which often extends to distant cities and trading centers. In addition to his salary he frequently receives a commission of not more than one-half per cent on all goods purchased or sold for the firm which employs him. He engages and pays the Chinese staff and handles the native customers, who seldom have direct dealings with foreign members of the firm. He keeps in close touch with market conditions and is able to determine what goods can be sold, while his knowledge of the financial standing of native dealers enables him to protect his firm from loss."

Will the time ever come when the comprador will pass into history?

We have been unable to find anyone who can see such

a possibility in the near or distant future. The chances are that the foreign firm would not do away with its comprador if it could. In this connection Mr. Odell says:

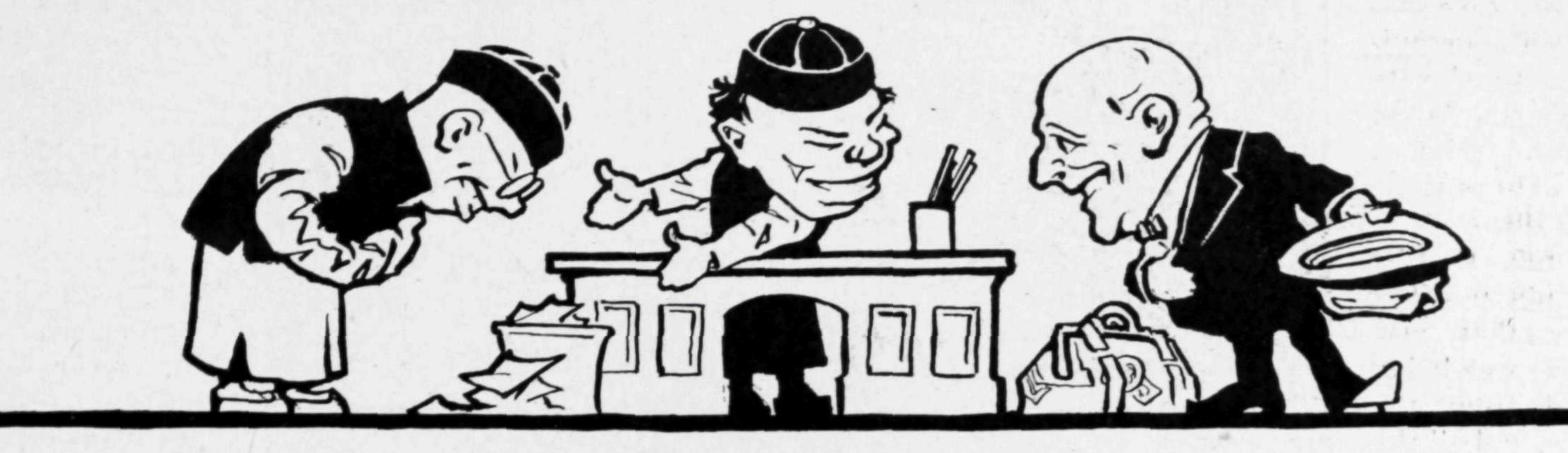
"The usefulness of the comprador and his value as an intermediary between the foreign firm and the native dealer far outweigh any disadvantages inherent in the system. The compradors with their keen knowledge of the country and its people, have been an important factor in the development of trade in China."

And Mr. Julean H. Arnold, American Commercial Attaché at Peking, observes in a contribution to the Far Eastern Review, that as long as present trade conditions exist the comprador will be an indispensable factor in Oriental business. The Standard Oil Company

and the British-American Tobacco Company are the two firms in the China trade which have their own organizations in the field to a greater extent than any other, yet they have been unable to eliminate the middleman and his legitimate "squeezes".

German firms which have made it necessary for their staffs to study the Chinese language and customs, have enjoyed astonishing growth. While their successes have been largely due to this factor, they have been unable to do away with the comprador and his numerous hangers-on.

So, Mr. American Business Man, you who have a weather eye on Far Eastern trade, allow us to present herewith your representative in China, the Comprador.



The Commercial Club in the Back Country

How Business Organizations are Reaching into the Rural Districts Because They Realize Trade Depends on the Prosperity of the Farmer

By BRISTOW ADAMS

UST about one hundred years ago the great Napoleon is reported to have said that "agriculture is the foundation of commerce and manufacture". We have been a long time acting on that suggestion, but there are a number of hopeful signs that the idea is beginning to take root. The deplorable fact is that commercial interests and agricultural interests have been antagonistic, as if their respective profits and prosperities lay in diverse directions, when in reality just the opposite is true.

However, it is not the purpose of this article to call attention to errors in judgment, but to point out a few examples of the get-together spirit between urban business organizations and rural communities, and to give a few opinions from recognized authorities as to the need for such cooperation. We are finding out that it is the steady production of the back country, or better still the "background" country, which really counts, and that upon its advancement depends the advancement of the more congested community. The sporadic, mush-room boom times or startling growth based upon the sudden discovery of a valuable natural resource are not the normal or true measure of greatness in any region. There we reap where we do not sow, and permanency is not to be had. Time was, for example, when the name "California" was synonymous with "gold", and that was all that anybody ever went after when he crossed the Sierras. Now they say that the prune crop is worth more than the gold output; and the prune crop will keep agricultural press, through meetings in the little rural

coming, along with oranges, lemons, grapes, and cherries, while the gold production—though it has kept up remarkably, due to new inventions in ore extraction—is bound to decrease, and, eventually, to become negligible.

So some commercial clubs have seen that the growth of the city depends on the country back of it, and they have wisely expended a lot of effort on the development of that country. Here are a few examples:

THE Commercial Club of Louisville, Kentucky, some years ago started a state-wide campaign toward the betterment of the rural schools and the farming practices of its back-ground country. This was fairly important to the city of Louisville, because a large part of the business of the state clears through its one large city, which has about four or five times the population of any other Kentucky city. The better the standards of living and the higher the ratio of farm production in the rural districts, the more business there would be for Louisville both in buying and selling. Even with these facts staring them in the face, the remarkable part of the campaign was that no one had any idea of exploiting the country for the benefit of the town, and all the work was conducted with the single aim of being beneficial to the agricultural and educational interests of the State's back country, and some of it is a long ways back.

The Commercial Club organized an educational committee and that committee worked through the rural and

communities, such as are now held by state agricultural extension workers under the august patronage of the United States Department of Agriculture by means of the so-called Smith-Lever act which provides liberally for extension schools and demonstrations in agriculture and home economics. It must be kept in mind that the Louisville business men were in the field and doing effective work years before the bill was passed. Their work

was to create interest in the improvement of farming methods, but more particularly, according to W. E. Morrow, the secretary of the organization, to elevate the standards of the rural schools. They went at these things in such a way, too, that it could not possibly appear that any pressure was being exerted from the outside, and all the improvements were worked out by the communities them-Whereat selves. they gained self-reliance and achieved results even beyond the hopes of the Commercial Club.

The moving spirit and the dominating influence behind the movement was J. B. McFerran, who had enough money to indulge his hobby and was willing to see it used for the benefit of others. His personality carried the work ahead a certain distance, and the fact that he was actuated by thoroughly altruis-

Another member of the committee was James Speed, with as much "pep" as his name signifies. He was the genius who prepared most of the press matter, and generally supervised the work. He made a study of the papers of the state, and he put out plate matter which was fitted to the needs of most of the country editors who were not always prosperous enough to pay for "all home set". This news service was crowded with human interest; it used pictures; it was "how to do it" stuff, written so

attractively that the reader was immediately imbued with the idea of "go thou and do likewise". The main secret of its success was in its ideal of service; there was not a line in it calculated to be of benefit to the organization which prepared it—the Commercial Club—because it was meant to benefit only the individual or the community which read it. Mr. Speed attended educational meetings, such as the conference for the advancement of educa-

tion in the South, to get new ideas and he put these ideas into effect. It has been interesting to see the development of his news service which started out as part of the program of the educational committee of a commercial body. Now it is embodied in the flourishing "Farm and Family", of the Louisville Courier Journal Company, with James Speed as its editor.

No one can accurately measure what the Louisville Commercial Club was able to do in leavening the lump in the rural districts of the state, but that it did a great deal cannot be denied by those who had the inspiration of seeing it at work.

Local chambers of commerce are doing this sort of thing in many places, but the trouble is that they are not doing as much as they might easily do, and in

fact in some localities they are holding back through the false notion that to help the farmer in a business way is going to harm the local merchant. They have not yet arrived at the knowledge that the prosperity of one member of the county or state—or nation, for that matter—means a greater prosperity for all the rest. Some of this lack of realization of the interdependence of all of us crops up in the proposal that the business men of the town help to organize a city market. In a good many cases the influence of a smaller mercantile association



In 1915, before the Ithaca City Market became a real institution, it had mainly an automobile trade; the idea appealed to, and was supported by, the "high-brow" ladies.



In 1916, after the market had proved its worth to town and country alike, it appealed to all "brows," rich and poor, and black and white, in ever-increasing numbers.

will be swung against such a proposal on the generally groundless fear that such a market will mean a hurtful competition. Thus, for example, a retail grocers' association will be able to maintain that the public market will hurt their business. Where it has been given a fair trial it has usually been found that it does just the opposite, that market days are the days of biggest business.

Some time ago the city of Ithaca, in the midst of a farming community, had the question of a city market brought to its attention, the issue being joined on the problem of the high-cost-of-living, as it affected the wives of the professors at the university "far above Cayuga's water." The merchants had been carrying the accounts of a good many of the members of the faculty, who are proverbially impecunious—because of the prevalent low wage scale for professorships-and these merchants did not quite like the idea that the farmers should come into a market and sell in competition on a cash basis. The farmers had no overhead charges for an attractive place of business, they had no heavy delivery charges and costs for other services which the buying public had demanded of the town merchants. It did look rather one-sided.

However, the plan was carried through, and the market was established. It had some vicissitudes at first but it finally prospered. What did the merchants find? That the country people were coming to town and buying; that the market was bringing back to their stores the farmer trade which had gradually been falling off as a result of the parcel post, rural delivery, and mail-order buying. They found also that the poorer people of the town had more money to pay the grocer for staple articles, and that the sales of the local merchants did not fall off in volume, but they did fall off in the perishable farm products on which the grocer was taking a great many risks, and on which his margin of profit was very small. His sales of standard commodities did not diminish, but rather tended to increase. The other merchants soon saw that market days were the days for special sales, the days for their bigger business.

THEN the larger city of Olean, New York, took up the I market, and in that place the movement was started and carried through by the Chamber of Commerce itself; though when it started its campaign it got from Ithaca the moving spirit in the market plan which had been put into effect there. This was Mrs. A. W. Smith, the wife of the dean of Sibley College of Engineering, of Cornell University. She told Olean the difficulties and the encouragements which she had encountered, and in general, charted the way for them. Her charm of manner, her forceful and business-like presentation, so impressed the folks of Olean that the market was started with all enthusiasm and no holding back. Now Olean's merchants, like those of many another town which has tried the venture, have found the ties of mutual interest which bind the city and the back country together. And these ties are those of true cooperation and mutual understanding instead of the aloofness that too often exists between city and country to the detriment of both.

NO less an authority than David F. Houston, Secretary of Agriculture, has said:

"The great thing to do for the benefit of agriculture and rural life is to awaken urban communities and business

men to a sense of their responsibility toward these subjects, and to enlist their constructive interest and support."

EDITOR'S NOTE.—In an article "Agricultural and Commercial Cooperation," next month Mr. Adams will discuss various methods that have been found successful in bringing country and town into closer partnership.

SPEEDING UP MOTHER NATURE

(Concluded from page 6)

essential. These large vessels are used also in making paints, syrups, varnishes, oils, and nitric acid. The metal which was hitherto a curiosity is, in powdered form, the basis of aluminum bronze paint, and is used in explosives, in printing, and in lithography. As a wire it is used in long-distance electrical transmission; to lessen weight, it is an integral part of the structure of automobiles and aeroplanes. Its basic material, bauxite, is used in abrasives a good deal harder than emory or diamond, in bauxite bricks for high temperature furnace linings, and for making alum and the aluminum salts.

Thus we see that the mineral curiosity of one day may become the valuable ore of the next, as soon as the metal-lurgist and the chemist get to work on it. This has happened within the past few years in connection with the radium mineral carnotite. The principal ore of aluminum, bauxite, was not even mentioned in a list of useful minerals published by the United States Geological Survey twenty-five years ago.

SEE what has been done in iron and steel! By the use of ferro-manganese ores, and by the use of vanadium, the chemical metallurgist has produced qualities of hardness and strength which were never thought possible. It is said that the solution of the problem of flight by man has been due not so much to overcoming the mechanical, or dynamic difficulties, but the chemical difficulties of fuels which were light and portable, and of materials which possessed the required strength without undue weight. The development of the submarine depended, in its turn, on the chemical manufacture of air and of power in the form of gas and electricity.

There is still a long way to go, and there is still need for an educational campaign to arouse the country to the need of chemical research as a national asset. Business should come to the aid of Johns Hopkins University, according to President Charles H. Herty, President of the American Chemical Society, who says that this "cradle of American chemical research" should not have to undergo any struggle to erect a new laboratory on its new site, and that "Cornell University, with its strong chemistry staff, should not have to delay the replacement of its burned laboratory through lack of funds." Such laboratories not only train chemists, but they are the means of solving many of the most perplexing problems of business, the problems that are likely to mean the difference between profit and loss. Government, also, can well afford to invest in such laboratories; as it has done, for example, in the Forest Products Laboratory at Madison, which has meant so much to the wood-using interests of the country. In short, so long as any sort of waste continues to go unheeded in the industries of the nation, there is need for every encouragement that can be given to chemical research, as part of a far-seeing plan of conservation.

A Clinic on the Railroad Situation

By

By Alfred P. Thom

RAILROAD regula-tion, unlike the reg-ulation of our banks, was born, not as a part of a constructive and creative system, but came out of the sense of an outraged public, which was

demanding merely repression, correction and punishment. The American public is now confronted with this proposition: Can this railroad industry survive if regulation is to be permanently based upon these principles of correction, repression and punishment? I think there is no intelligent business man who would not answer that question in the negative.

Then the next question that will come up, if it be admitted that this is not to be permanent, is whether that system of regulation has done its work, whether the time has come when other principles should be introduced, when it is to the interest of the American people that we should begin to build rather than pull down and destroy.

The system of regulation to which I have referred is admittedly a repressive and corrective measure. Has the time come for a change in the conception of the American people on that subject? If it has not come, if it will never come, if there is no possibility of the managers of American railways being entitled to the trust of the American public, then there is an end of government regulation; then there must be government ownership. If you cannot pick out from among the American people men who are to be trusted to manage these essential elements of communication and progress, who will honestly and fairly administer their trusts, then there is no opportunity of a continuance of the system of private ownership.

I had an illustration a short time ago of the change of sentiment that has come over the management of American railways. I was present at a stockholders' meeting of one of our principal lines, and one of the stockholders, clad in the garb of a minister, got up and demanded a dividend, and said that the railroad managers of the country were forgetting that their first duty was to the stockholders. The president of the company, who was presiding, at once stopped him and said that it must be recognized that the first duty of American railroads was to the public, and their second duty to the stockholders.

Compare that attitude of railroad management with the attitude which was credited,-improperly, I am told,—to a leading railroad man some years ago, whose

Alfred P. Thom

General Counsel of the Railway Executives' **Advisory Committee**

Representative William C. Adamson of Georgia, Author of the Eight-Hour Law

President Charles R. Van Hise

University of Wisconsin, Chairman Arbitration Board, 1912 Railway Controversy

doctrine was said to be, "the public be damned". We stand now before the American people declaring our belief that the work of correction, repression and punishment has gone far enough to enable the American people to pass deliberately on the question of whether or

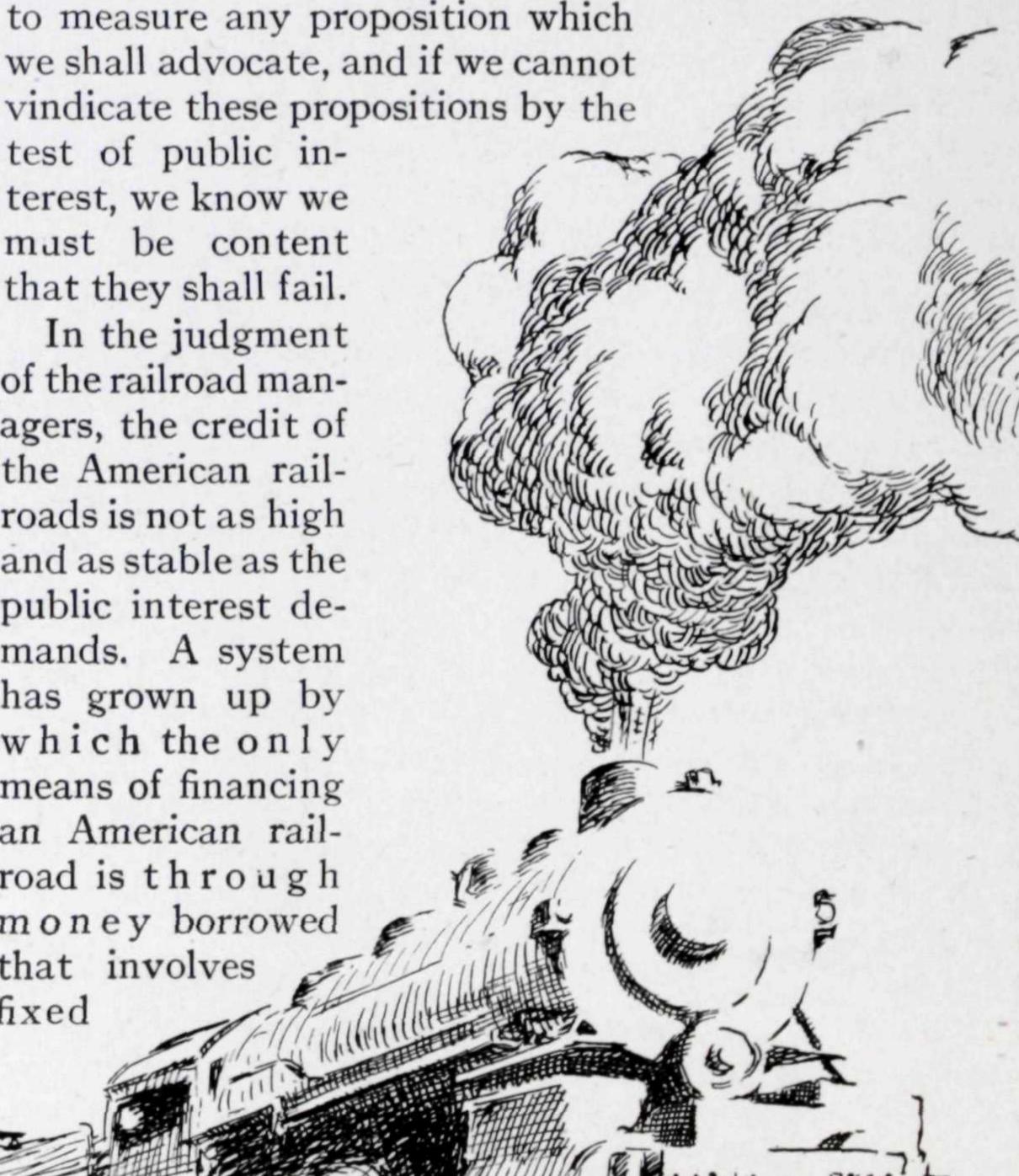
not principles of encouragement and construction ought necessarily, in their interest, to be introduced into the system of governmental regulation.

We stand, furthermore, for the proposition that the character of the men in general in charge of these instrumentalities of commerce has come to be such that they are now entitled to the trust and confidence of the American people, because they realize the sanctity of their fiduciary duty in the management of these great instrumentalities.

We recognize as a sound governmental principle to which there can be no longer exception that governmental regulation has come, and rightly come, as a permanent part of American policy. We recognize also that we must accept the standard of the public interest by which

vindicate these propositions by the test of public interest, we know we must be content

that they shall fail. In the judgment of the railroad managers, the credit of the American railroads is not as high and as stable as the public interest demands. A system has grown up by which the only means of financing an American railroad is through money borrowed that involves fixed



EDITOR'S NOTE. These three angles of the railway question were presented in person and with greater detail on the occasion of the meeting of 300 Councillors of the National Chamber, in Washington, November 17 and 18.

charges. There is no opportunity, speaking generally, of obtaining money for American railroads through the issue of stock. We think that we have borrowed and mortgaged until the equity in our properties has been reduced to the danger point. We think, moreover, that under the present conception of regulation there is nothing before us except to keep on borrowing, to keep on mortgaging, and to keep on piling up interest, fixed charges.

You are interested in this because your prime interest in transportation is that it shall grow and be strong and prosperous to do your business. Some means must be found by which railroad facilities will keep pace with the growth of commerce, for the capacity of your transportation systems marks the maximum capacity of your production and your manufacturing industries.

What is the business man's supreme interest in transportation? Let your minds revert to the 4th of last September. At that time there was a threat of absolute cessation of transportation in the United States through a universal strike. Every man of you, if that strike had come, would have been willing to double your pay if you could have got your train. The question would have been whether or not you could have carried on your business, not the terms on which you could have carried it on.

We point to another fact: railroad construction has been stopped in this year of 1916. Are the American people going to be satisfied with the stopping of railroad construction at a time when some sections of the country are amply supplied with railroad facilities while there are other sections to which that ample supply is denied? So we think that from whatever angle you examine this question, all thinking men must realize that the supreme need of the American people is to establish a credit for

American railways which will enable them to do the public business.

We find our business, which we say ought to be managed on business principles, managed on political principles. The first thing that arrests our attention is that we are not regulated by one consistent and uniform governmental policy, but we are controlled and regulated by forty-nine governmental policies. The level of our revenues is determined by the government; the amount of our expenses is deter-

mined by causes beyond our control, by the demands of labor, by the imposition of legislative exactions, by the requirements of government authority. We therefore stand before you as a business which has no control over either its revenue or its expenses. If, under those circumstances, we survive, it will be a miracle.

We propose that Congress shall exercise its full constitutional authority to take charge of the regulation of commerce and regulate it impartially in the interest of all the states and all the people.

Our first suggestion is that there shall be a system of compulsory federal incorporation, and that every railroad that undertakes to do an interstate or foreign business shall be a corporation of the national government and subject to regulation by it in all its parts. We deem it misrepresented all over the country the eight hour law as a wage law. Congress has the power to regulate wages in interstate commerce if it wants to, but it never has done so. Congress never has undertaken to regulate all hours of labor because it did not think the Constitu-

essential to have but one regulating authority. Whatever regulation of the issue of stocks and bonds is adopted should be exercised by one body; we cannot finance these roads if we have to go not only to the Interstate Commerce Commission but also to the commissions of all the states.

By WILLIAM C. ADAMSON

I GATHER that the main purposes of the railroads in describing the troubles under which they labor are that when they go to finance their roads they have to procure the approval of the different state commissions because the roads run through different states. They have to go before the state commissions and finally before the Interstate Commerce Commission. In some cases they have local and in others federal rates. The two remedies proposed are, first, government ownership, and, second, federal incorporation. Then they have a detailed proposition to abolish the present Commission and in lieu of it to create regional commissions over the country.

Of course the members of the joint subcommittee already have some views themselves; some of them have threshed out those questions for twenty years, some of them considered long ago the question of federal incorporation, some of them know the objections to it, and some of them know and recognize that the paternity of the child does not have anything to do with its subjection to law. But, anyhow, they are of the opinion that the authority that incorporates a corporation cannot invalidate any provision of the Constitution that prevents an interstate carrier from violating the local laws of the states when its business is intra-state.

There is no way on earth to abolish the forty-eight tribunals that the railroads talk about, so far as intrastate commerce is concerned, except by amending the Constitution of the United States. Whether the people want that or not, it is for them to say. The right of revolution always exists and there is no other remedy. The right of amending the Constitution is the foundation of basic law. If the Constitution is to be amended, if local self-government, so far as transportation is concerned, is to be abolished, if everything is to be centered at Washington in the control of your business just because a few capitalists have acquired all the railroads in the country and want to change your system of government in order to accommodate their financial ideas, I want the people to say so. I do not want it done in any manner except with their full, free, open discussions and unqualified approval.

I do not believe the railroad presidents and managers would agree to Dr. Van Hise's suggestion to regulate wages. They can scent danger from afar, as we might go to curtailing the salaries of the managers and the presidents, and you know that would never do on the face of the earth. So, you see from the initiative, the railroads will fight fixing salaries, and for that reason they have misrepresented all over the country the eight hour law as a wage law. Congress has the power to regulate wages in interstate commerce if it wants to, but it never has done so. Congress never has undertaken to regulate all hours of labor because it did not think the Constitu-



S to wages and the hours of labor,

conditions the only ultimate method

it is very evident that under present

of settling a difficulty between a railroad

and its employes is a resort to force. And

the question is whether a nation pretend-

ing to some degree of civilization, which

has eliminated the doctrine of force from

application to controversies between man

and man, and which furnishes judicial

tribunal for the settlement of those con-

troversies, and which is now and has

been for years endeavoring internationally

to secure a system under which the nations

of the earth will create similar tribunals for

the adjustment of international disputes

without resort to force,—whether such a

civilized nation can be content to per-

petuate the existing condition of things.

This is a subject of profound thought. It

will require the best and the most humane

consideration of communities and state

to meet this condition and by eliciting the

best thought not only of the corporations

affected, not only of the thinkers and

economists of the country, but of the men

themselves employed by those corpora-

tions to create some system under which a

resort to force, the most barbaric and

brutal of processes, can be avoided for the

settlement of disputes between great em-

ployers and vast bodies of employes.-

From the opening statement of Senator

Francis G. Newlands, Chairman of the Con-

gressional joint committee to inquire into the

It would seem to be our highest duty

and of the nation itself.

railroad situation.

tion authorized it, and, I suppose, another reason is, it did not propose to be officious and obtrude its actions before the conditions arose and somebody asked it. The only thing Congress has been working on in that line are the hours of service for men who operate trains in interstate commerce. A long time ago we found out that it was dangerous for sleepy men to run trains, and we have been cutting down the long hours.

Both the operatives and the officials seem to forget the master, they seem to have forgotten that they are in public service and that both the managers and the train operatives are trustees for the public. Therefore, I say, both sides forget they are working for the public and they cannot make a fight that will stop interstate commerce as two men fighting in a street can scare traffic off of that street. Congress will

have to remind them of that, and when it enters the arena it will not enter as a partisan of one class, but as the servant of the people, determined not to allow any interruption to public business. If the two parties fight, Congress will have to fix their rights and duties and control the whole situation in the interest of public business.

In their warfare, both sides employ very rough, if not barbarous, methods. The capitalist who has amassed millions can live during a strike; shutouts or lock-outs are inhuman to the men. The men should be treated as if they were human beings. On the other hand, a strike is outrageous so far as the public is concerned. Whatever may be said about it in private business between man and man, such a strike as would interrupt the business of this country and bring suffering, misery and probably civil war to mar the peace and prosperity of this happy land, is intolerable.

The wrongs of the two classes of men should be righted, they should not be misrepresented by each other before the public. They ought to be righted if possible, and, if they cannot, just say so, and we will do right for them. So far as I am concerned, I do not think any representative in Congress will wait for the report of

the Joint Committee, but we will probably go ahead anyhow.

On the proposition of government ownership, I do not know whether anyone will seriously argue that or not, but if they do it will be on the well-known thread-bare theory that regulation is a failure, and the government must own the railroads to prevent the railroads from owning the government.

We have never reached that extremity and never will until republican institutions bite the dust at the feet of despotism. Sovereignty to control men and property does not depend on ownership. Whatever is necessary to regulate men and property in this country, the government, either state or federal, can do. Under our system

of government and our Constitution, all the representatives have to do is to do their duty, and they will control without owning the railroads.

The proposition of the railroads is that the power ought to be centralized, that they should not be required to go into 48 states to transact their business. J. P. Morgan could say, in order to take mortgages in Alabama and Illinois, that they ought to abolish all control in Alabama and Illinois, so that he would not have to study usury or interest or any dishonesty in financial transactions subject to more than one jurisdiction.

So far as the financing of the railroads is concerned, I do not know of anybody who ever asked these capitalists to buy up all the railroads that the people in the different states had helped to build, with local understandings, for local accommodation and local traffic, and consolidate

them into one, two, three or a dozen great systems to speculate on.

If railroads would study a little courtesy and operate to please the people, they would not have to work so hard to secure resolutions from chambers of commerce. If they just remember that the railroads which they now own were gotten up by the people, that they run through the territory in which those people live, and that those communities furnish the juries on which they must rely for their verdicts, whether in state or federal courts; that those people should have local accommodations as good as are furnished on through trains, they would get along much better.

By CHARLES R. VAN HISE

It is possible that the courts will hold that in the case of these public utilities which should be operated for the benefit of the country there can be no concerted action for strike. And yet the decisions of the courts thus far are against that, at least so far as the question has come up in ordinary cases. But this case is of so exceptional a character that the court might take a different position.

It seems then extremely probable that the court would go so far as to say that the strikes may not be made pending investigation and report by a disinterested party in which the public and the parties are represented.

We have certain lines of decisions which look in that direction. The seamen may not leave the ship at any time, although no one would claim that there is involuntary servitude in the sense of slavery for the seamen, and yet it is obvious that the seamen in the case of ships may not leave at any time that they will, and they may not leave in concert. So an exception has been made by the courts in this particular case in which the public interest demanded that the right of freely leaving work by concert should be overthrown.

If that is the case in regard to ships, it is far more important in regard to the railroads, and I think it is fairly probable that the courts will hold that the men may not concertedly leave, with proper penalties, until there has been an opportunity for investigation and report by an industrial board. This is the Canadian method. In Canada industrial disputes and lock-outs have been enormously reduced. They have not ceased under it, but they have been reduced. Before a strike or a lock-out may occur, there must be a board of conciliation and mediation appointed, one from each party, and they agree upon another party, or the other party is appointed by the government, and until that board has investigated and reported recommendations, neither side may act. The employer may not lock out the men, and the men may not strike. Under those conditions, after investigation has been made and recommendations made, those recommendations are likely to be accepted, because there has been time for both sides to cool off, in the first place; and, in the second place, public opinion knows where it should go.

IN this controversy nobody can have a just opinion Lebecause a just opinion cannot be obtained until the investigation has been made. But the dispute having arisen, and an investigation having been made by an impartial board and recommendations made, the great majority of us follow that opinion, follow those recommendations. It is the best source of light that we have on the question. And so the full power of public opinion is behind those recommendations, and so enormous is that power that neither side dare neglect it in any great measure. In consequence of that fact, this act has been successful. As President Willard said in a lecture at Berlin as exchange professor, "In America the last resort in all business is public opinion." Therefore it is necessary for us to find out a way for it to express itself, and express itself wisely, and it can do so if there have been an investigation and recommendations. I doubt if either the railroads or the men would dare to go contrary to the recommendations of a proper jury.

In the case in this country if that line of conduct is taken, it is only necessary to amend the Newlands act, which provides for a board of mediation and conciliation, and the board has all of the machinery for making investigations and recommendations, the two sides of the controversy being equally represented, but they have no power to compel either side to resort to that tribunal, either in the way of investigation and conciliation, or

arbitration. Of course, if we could do just what we ought to do, it would probably be well to say in this matter we should have compulsory arbitration, but we know how difficult it is in any Anglo-Saxon country to reach a logical conclusion.

The railroad men feel that under the present circumstances they cannot surrender the right to strike. They have no court to which they can turn, but the logic of the situation demands this: if the railroads are controlled in other ways, and if the charges all go to the public as I have pointed out to you, and if the public interest is paramount, regulation should go to its logical conclusion, deciding what is a just wage as well as what is a just charge.

The advantages of this plan are obvious. It would be possible to create a wage commission or a division of the Interstate Commerce Commission—I care not which. If such a commission existed, an investigation would not be required to be taken up sporadically, as was this complex investigation with no data, but there would be a set of experts to work all the time, finding out what the income of the railroads is under present conditions, what their expenditures are, about the rising and falling cost of living and the cost of wages elsewhere for their own lines of industry and a determination, so far as it is in human power to determine, what a just wage is in business in which the public interest is paramount.

I would have no objection to there being upon the permanent commission, upon one side a representative of the managers of the railroads and upon the other side a representative of the labor people in each case so that there should be sitting with this central commission representatives of the two men, not only in the presentation, but in the arguments and in the consideration of the evidence which will be to a conclusion. Indeed, I think that kind of a commission would be an improvement, having a permanent center representing the public and this shifting group of two or four, as the case might be, for each individual man.

Now, the question of where the wages go which the public pays is decided by power and not by justice. The men who are powerful enough to organize and bring pressure have their demands acceded to. Those forms of force which are unorganized and weak are neglected, and in part neglected because of the successes of this other group. If we had wage commissions, then we should have not merely the wages of the engineers, the firemen, the conductors and trainmen to consider, but we should have the wages of all branches considered all the time with relation to justice and equity as compared with wages in other lines of industry and in accordance with the resources of the railroads.

The present method of settling these controversies through strike is impossible—the strong will be favored and the weak neglected. Therefore, I say while I do not expect at the present time more than this step will be taken, this second step will be sooner or later inevitable in this line of industry in which the public is so profoundly interested. We cannot tolerate a situation in which it

shall be possible again for any group of men to hold up this nation and, at the point of the pistol, demand that they receive what they ask without investigation or else 100,000,000 people will be placed to enormous losses and intolerable suffering.

If the public interest is paramount, as I have said, the railroads of the country must be permitted to charge freight and passenger rates sufficiently high so that a just wage will be paid all along the line, to all classes of employees, not to one group only, but to all.



THE BIRTH OF A NEW PROFESSION

The Science and Art of Guiding and Upbuilding Community Life is Being Dignified by Universities with a Place Alongside Law, Medicine and Engineering

By ALFRED L. SMITH

Professor of Commerce, Amos Tuck School of Administration and Finance, Dartmouth College

Decorations by Charles E. Howell

THE primitive cave man fought all his kind for the privilege of holding his place by the fire; the important unit of life was then the individual man. With the advance of civilization came the growing importance of the family, the tribe, and the village as an economic, social and military unit. Nations have grown and every region within them is dependent on every other. Recent events have made the world realize the unity of empires. The possibility of international economic units with nations and empires as sub-units has become a probability. Yet, complex as civilization may become, and large as economic units may grow, the community will remain the vital unit in the economic and social life of peoples; and so, as never before, discussion of community competition, community development, community efficiency, and community consciousness urgently demands attention.

At the same time there is growing the realization on the part of dwellers in this important economic and social unit that comparatively few community problems are governmental; they are the problems of business and of civic as apart from government; and with our conception of the theory of government, they are to be investigated, agitated and finally solved by public, yet non-governmental agencies. It is coming to be more and more the case that even those community problems which must be ultimately solved by governmental agencies through the creation of legislation or the enforcement of laws are nevertheless usually solved by methods which are born and nurtured in a commercial and civic organization.

Board of Trade, Commercial Club, as the community may prefer to designate them—are the great instruments of community development. Any important improvement in the management of them, therefore, compels the serious attention of the keen business man and the approbation of the good citizen.

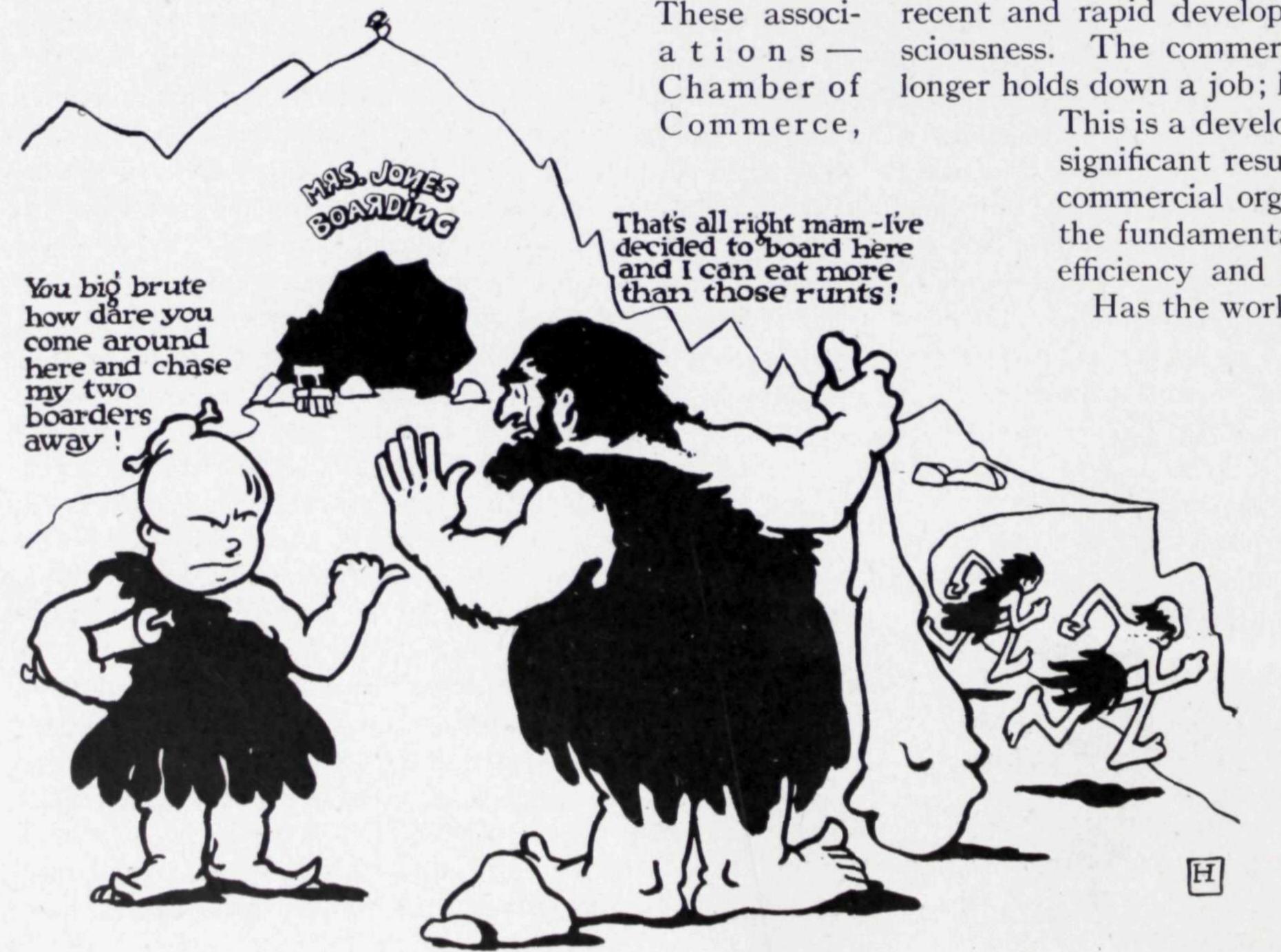
Commercial organizations are formed to promote and guide community development in order that the community may become a place in which "it is worth while to live, rear children, invest money and life." This is a program of idealism and service to the community, conducted always with chief consideration for the future. But, activities making possible the ideal state are activities of the present, not of the future. They are usually plain business projects with immediate problems and results, and are not of themselves directly concerned with the far distant future. Even civic programs feel the exigencies of the moment. In other words, the commercial and civic organization conducts a business; and like every business concern, efficiency must be the slogan. From the very nature and purpose of the work of these organizations they have the dual requirement of idealism in devotion to community service as well as efficiency in operation. Likewise, idealism and efficiency must be the characteristics of the successful executive in these organizations. Such a man is a rarity and a treasure.

In a recent convention attended by nearly three hundred of the men directly in charge of the destinies of the commercial and civic organizations of this country, the feature which stood out more than any other perhaps was the recent and rapid development of the professional consciousness. The commercial organization secretary no longer holds down a job; he is a member of a profession.

This is a development which ought to have as significant results as the development of the commercial organization movement itself, for the fundamentals of professional practice are efficiency and idealism.

Has the work of a commercial organization

secretary really developed into a profession? While the profession is still in its infancy, and certainly has as many changes ahead of it as the recognized professions have had since their beginning, it is nevertheless a true profession now. The dictionary defines a profession as an employment—not agricultural or mechanical. This, of course, is not the customary usage. One's profession is defined as the business which one follows



for subsistence and of which one claims to have a knowledge. This implies the usual conception of a profession as a calling, of which certain principles must be under_ stood for successful practice. Therefore, if the work of a commercial organization secretary requires a knowledge of principles, it is then a profession.

Commercial organization secretarial work has become a profession only within the past three to five years. Until recently secretaries knew little about, or recognized the need of, uniform methods of procedure, or thought of definite principles in commercial organization practice. The interest at secretarial gatherings is

now focused on the definition of proper policies, and on those activities in which there may be developed a recognized method of procedure. There is also being evolved by a number of men certain philosophies of commercial organization work and methods. This is another indication that the work has become a profession.

The fact that this has become a profession is the reason for academic education for it. When there is a philosophy of work, and when men on the job have grown beyond the period of solution by trial and error, then the beginner should enter the profession with a thorough knowledge of what has been learned before by trial and error and bitter experience. Otherwise the beginner always remains somewhat behind the highest development of the work as carried on by the most experienced men in the field. Academic institutions will never be the only place to learn the necessary principles and standard practices, but, as in the case of the other professions, experience will show that academic training can be made the easiest, quickest, and the most efficient method. Furthermore, as in the case of the other professions, the development of the profession and the development of education for it will go hand-in-hand.

A commercial organization philosophy, clearly defined principles, recognized standard methods of procedure, absence of the trial and error or experience method of learning rudiments, and specialized preparation-not necessarily but increasingly academic-must constitute the basis of efficiency in the commercial, industrial and civic development of American

communities.

A brief examination of the socalled professions will show a characteristic not suggested by definition; this is the tendency toward idealism and consecration to service. Devotion to the ideals of his profession is usually a characteristic of the professional man. To some extent, this is recognized Has the new professional thought of this?

by the community by the special honor and esteem in which a professional man is held. Unfortunately, in many professions the reward which comes from a knowledge that the task has been well done, and from the standing given in the community, is to a large degree substituted for financial return. In the three great and oldest

Tallest Buildings-Purest Water-All together now-a little more pep!! Power Cheaper by at least a quarter Building Sites best in the land-Place to live in? SIMPLY GRAND!! professions—law, theology and medicine-devotion to the ideals of the profession is especially emphasized. The clergyman when ordained is given a charge to keep; the young doctor takes the Hippocratic oath; the conscientious member of the legal profession considers himself bound by the code of ethics adopted by his bar

association. The educator often clings to his profession in spite of financial disadvantages because he is so immersed in his work that he receives his reward from the knowledge he has of the value his work yields to the world. The typical engineer is actually a part of his job. In the newer professions, such as that of the public accountant, for instance, there is usually some committee for the decision of questions of professional ethics; while in others, as the American Institute of Architects, there is an adopted code of ethics. Thus it is in all professions, and thus it will undoubtedly become in this new profession. Early tendencies in this direction are now discernible. One hears discussed the ethics of this or that practice, or the duty a commercial secretary owes himself, his organization and the community which he serves.

Perhaps no one thing contributes more to the nobility of a profession than a professional attitude or consciousness on the part of those who constitute the profession. The further development of the professional attitude on the part of the commercial organization secretaries of this country is the thing most needed for the development of the profession. The development of a profession will produce a group of men efficient in the work of to-day, and add to efficiency the prime requisite of duty to community; and will promote within the same group a vision of a better to-morrow combined with a realization of, and sympathy with, the insistence of the demands of to-day. It is the thing most needed to improve the management of commercial organizations and to increase

the benefits to communities from them. The strength of the nation is measured by its community centers and it is fortunate at this time, when some see signs of community retrogression, that educators are beginning to realize that guiding and upbuilding a community has its professional aspects no less than law, medicine, engineering, and journalism.

Mr. Professional Man
I just dropped in
to pay my bill But I can't eat that!



By JAMES M. BINKLEY Decorations by H. Devitt Welsh

IN say on farms, their wives approving—and villagers, catching and revoicing the phrase, add their support to the judgment—that anything solid and salable is equal, almost, to "old wheat in the barn".

Superlatives halt there. Government bonds, as standards of value and security, are mysterious and far away. Money in bank can vanish overnight. Nothing is comparable to old wheat, unless, perhaps—and the adverb of qualification is always used—it might be a first mortgage on the land across the road.

Such, then, is the standing of wheat among those by whom it is grown—old wheat, dry wheat, "my wheat" and good as gold. Prices, be they high or be they low, vary not the feeling on the farm.

Wool falls and the thick, yellow dust of hill roads marks the death march of countless droves to the pelt and tallow men. To wheat, on the other hand, through winters of thaws and freezings and summers of rust and drowning rains, the farmer, once fairly in the business, is ever steadfast.

Wheat is dear in 1916. For thirty-four years, however, during which generation of time boys became men with homes and acres of their own, the farm price of wheat was less than a dollar a bushel. And yet wheat was grown. Indeed, its acreage increased.

The day would come, so the theory ran, even in the gloom of debts and unrequited toil, when wheat would be vindicated in every market of the world. It is here.

If wheat could be personalized, its biography, spanning the ages between Canaan and Kansas, between Ruth, the gleaner, and the millers at the Falls of St. Anthony, would be the greatest of all books except the Bible. Pictorialized, it would show camels bearing sacks across the deserts, far back in the centuries; a slave of Cortes planting a few kernels of a strange grain among the Aztecs and groups of lonely and bearded Russians founding an industry on the semi-arid plains beyond the Mississippi,

out of which cities were to spring almost miraculously. Contained in each grain of wheat is the history of the human race.

But bread this minute is six cents a loaf. In the ancient red building, and the only one, until not so long ago, occupied by the Agricultural Department, among hundreds of books, pamphlets, documents, curves and maps, all scrupulously clean of dust and methodically arranged, can be found one of the world's greatest statisticians.

Specifically, Frank Andrews—that is his name—is in charge of some of the crop records of the United States. Born in Indiana, educated at Johns Hopkins University, he has been working with facts, as expressed in figures, for more than fourteen years. Give him the mathematics of a situation and he can describe and explain it. Ask him any ordinary question pertaining to crops and he can answer it, with tables near at hand, in less than a minute. Why has wheat mounted in price?

"Let us eliminate the war in Europe," he said, "the drought in Argentina, the decrease of acreage in the Australian States and the estimated reduction in the Canadian crop and find a sufficient answer in the fact that where we harvested ten bushels last year, we harvested only six bushels this year."

"How high in price has wheat gone heretofore?"

"Usually, there are at least two prices for wheat—the cash price, which may be the speculative price, as, for instance, when a corner is being carried on, and the farm price, which is the average price received by growers in all parts of the country.

"There was a Hutchins corner in 1888. Cash wheat then reached \$2 a bushel. The Leiter corner ten years later ran the cash price up to \$1.85 a bushel. Such sporadic and abnormal performances of the market are without significance to the wheat-growing industry.

"Here, in the Department of Agriculture, we concern ourselves but little with speculative prices, noting them as they are made as incidents of no practical value.

What we want to know is the price the farmer receives for his grain. He gets so much in Kansas, so much in Minnesota, so much in Ohio and so much in Pennsylvania. Mathematics - addition, subtraction, division and so on—gives us the farm

prices prevailing in the country as a whole.

"The farm price for wheat on December 1, 1881, was \$1.19 a bushel. On the same day during every year that followed, down to 1915, the farm price was less than a dollar a bushel. On October 1, 1916, the farm price was \$1.36. We have to go back to December 1, 1867, to find a price that was higher or even equal. On the day last mentioned the farm price was \$1.45 a bushel. It was exceeded, however, on November 1, 1916, when the price, breaking many records, went to \$1.58."

"How much wheat has been exported to Europe during the war period?"
Mr. Andrews was asked.

"For the twenty-seven months, ending October 1, this year, 663,000,000 bushels, which is at the rate of almost 295,000,000 bushels annually. In the decade 1904-13, the lowest yearly

exports were 69,000,000 bushels and the highest 147,000,-000 bushels.

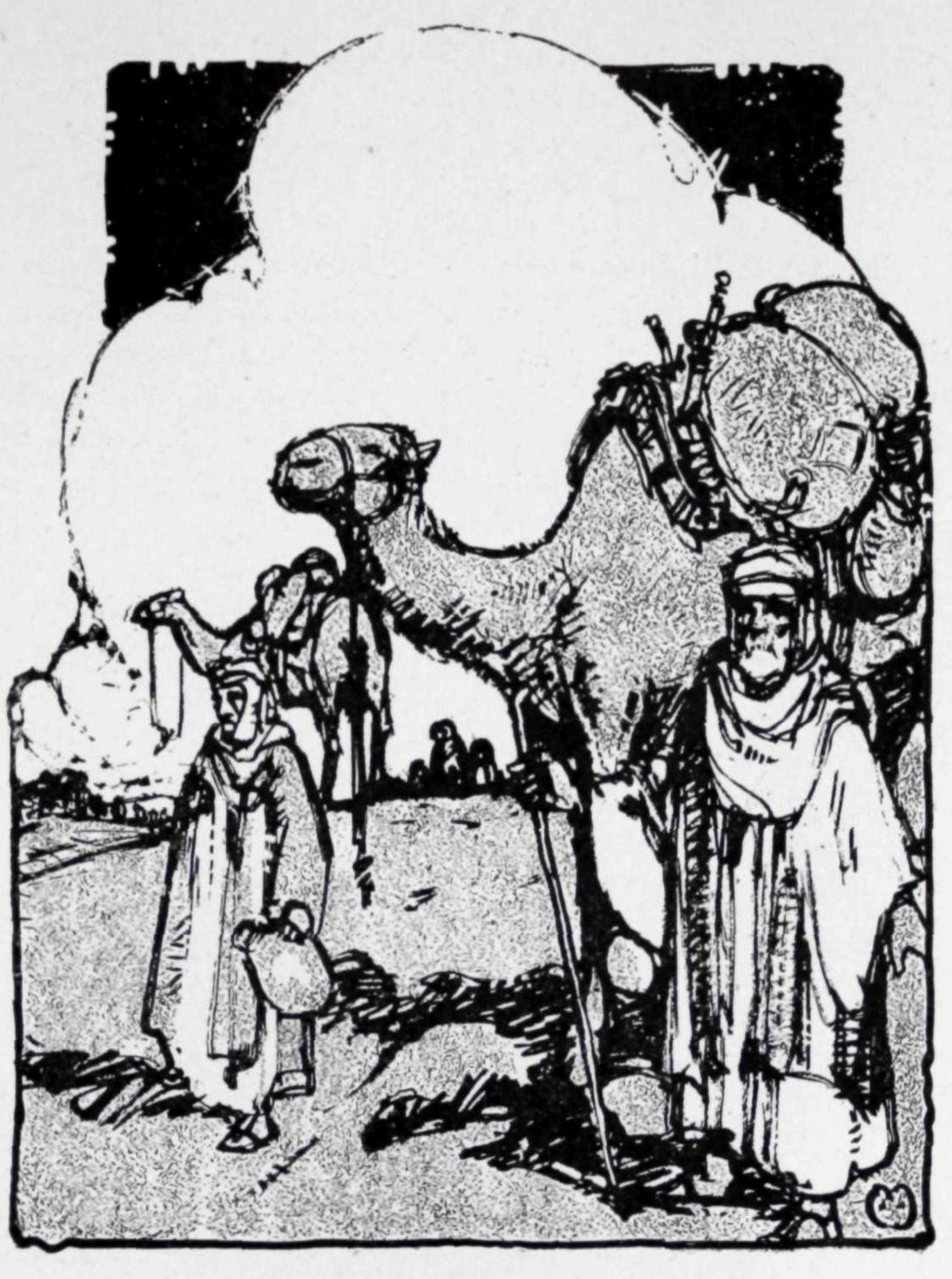
"Wheat and flour from this country are going to Great Britain, France, the Netherlands, Italy and Belgium, at present our most important customers. We exported during the twelve months ending last June a total of 173,000,000 bushels of wheat—54,000,000 to Great Britain, 31,000,000 to Italy, 22,000,000 to France, 21,000,000 to Holland, 3,000,000 to Belgium and 30,000,000 to other parts of Europe. Besides, large quantities of wheat were exported in the form of flour.

"How, you ask, does wheat get from American farmers to the flour mills of England? There are large exporting firms on the Atlantic seaboard, with branches as far west as Duluth. Local buyers, however, ordinarily purchase grain directly from the growers.

"The wheat thus purchased goes into elevators and is resold to the importers and shipped to New York, Boston, Philadelphia, Baltimore and Portland, Maine, in the East; to Newport News and New Orleans, in the South; to Galveston and Port Arthur, Tex., in the Southwest, and to Portland, Tacoma and Seattle on the Pacific Coast.

"All the shipments to Germany and Austria-Hungary, as every one understands, have been cut off. Wheat is sent from our ports in all kinds of ships—in liners and tramps. A tramp, with no other cargo, can easily carry 200,000 bushels, or the equivalent of 143 carloads.

"A White Star liner, in addition to much other freight, has loaded 136,000 bushels and the Minnehaha has carried 144,000 bushels, besides package freight and ammunition. The wheat rate now is twenty-six cents a bushel from New York to Liverpool.



A biography of wheat would span the ages between Canaan and Kansas.

"A steamer transporting 200,000 bushels earns \$52,-000, therefore, on its voyage to Liverpool. Earnings are further increased for the round trip by its cargo from England to the United States. In normal times the wheat rate, New York to Liverpool, is about five cents a bushel. In January, 1915, it jumped to fifty cents.

"Last winter, wheat freights were ninety cents a bushel from Portland, Oregon, to Liverpool. But before the war and the opening of the Panama Canal, they were seventeen cents, and around Cape Horn at that. Sailing vessels at present are getting about fifty cents.

"From the price of wheat at such Atlantic ports as Boston, Philadelphia, and New York, must be subtracted the cost of rail transportation, commissions and other expenses, if we want to ascertain the price the farmer receives from his

local buyer. For instance, we found when wheat was bringing \$1.14½ a bushel in Philadelphia, that the farmer in Kansas was paid eighty-seven cents. The freight by rail was twenty-one and eight-tenths cents a bushel. Other expenses were five and seven-tenths cents per bushel.

"Twenty-seven and a half cents a bushel, then, is added to the Kansas price to find the price in Philadelphia or, say, in New York; and twenty-six cents more must be added to cover the transportation to Liverpool. Practically, therefore, the buyer in Liverpool adds fifty-three cents to the Kansas price and learns the cost of the wheat at his own city dock."

"How large, ordinarily, is the wheat crop in the United States?"

"Your question," Mr. Andrews replied, "can not be answered precisely. Crops vary in size. There was an enormous crop in 1914. It was followed by the great crop of 1915, when more than a billion bushels were harvested. The crop this year, so far as we can ascertain, will be about 607,000,000 bushels, or 405,000,000 bushels less than the crop of the previous year. During the past decade, we have had four crops each of which fell below 700,000,000 bushels."

"And the acreage; what is that?"

"Naturally, the acreage, from year to year, also varies," Mr. Andrews answered. "Usually, it ranges from 45,000,000 to 50,000,000 and more. Last year—that is, in 1915—it was 60,000,000. Giving the figures in another way, the area of our wheat field was 93,747 square miles.

"It was about large enough, carrying the illustration further, to cover Denmark, Greece, Holland and Switzer-

land in Europe and our own States of Delaware and Rhode Island. To find the equivalent of its size right at home, let me say that its area equalled the area of Massachusetts, Connecticut, New Hampshire, New Jersey, Vermont, Ohio and Maryland.

"The yield, 1,012,000,000 bushels, at the highest farm price reached for the crop of 1915, could have bought the Pennsylvania Railroad—its tracks, locomotives, cars and real estate—extending from New York to Chicago, and the St. Paul Railroad, extending from

Chicago to the Pacific Ocean. Or it would have just about paid off the national debt."

"And the acreage next year will be larger than ever?"

"It would seem so, unless all the practices of human nature are reversed," Mr. Andrews replied. "Farmers in Maryland, I have heard, received this year as much as \$1.80 a bushel for their wheat. One can imagine what they mean to do with their land next year."

"How much wheat is consumed in the United States?"

"It was estimated last year that 601,532,000 bushels would be required for seed and food," Mr. Andrews answered. "The yield above that quantity constituted our surplus. Figures seem to show that there will be no surplus this year."

"Do you agree with the late James J. Hill that the United States, at no remote day, will be compelled to buy wheat in foreign countries?" Mr. Andrews was asked.

"I am not a prophet. My work is

with to-day. I have said, however, that we ate and planted 600,000,000 bushels of wheat last year and that our crop this year, as estimated, will be 607,000,000 bushels. Also I have shown that four of our crops within the past decade have fallen short of 700,000,000 bushels.

"The population of the United States is constantly growing and, rich or poor, a human being eats, in good times and dull times, about the same fixed quantity of bread. On the other hand, the wheat acreage, possibly, can be largely increased, or a more intensive system of farming may be adopted for the wheat lands already in use.

"The average yield of wheat in the United States has

been fifteen bushels to the acre. New England grows little wheat but the acre yield there is higher than anywhere else, being 25.9 bushels, for example, in Vermont. It is 25½ bushels in Maine. The Central West barely beats the average, the yield of Ohio being 16.6 bushels, of Indiana 15.8 bushels, of Illinois 16.3 bushels and of Michigan 16.7 bushels.

"In some States where wheat is grown on a large scale the yield is small. It is only 13.9 bushels in Kansas, 12.5 in Oklahoma, 12.4 in Texas, 11.9 in North Dakota

and 11.8 in South Dakota. The average of fifteen bushels to the acre was for a period of ten years. Acre yield dropped as low as 12.5 bushels in 1911.

"The growers of wheat in the West do not realize, perhaps, that cargoes of the grain can be loaded on the Plata River in the Argentine Republic at a transportation rate to New York of from six to seven cents a bushel in normal times. I have already said that the freight from Kansas to

the Atlantic Coast is nearly twenty-two cents.

"Our surplus wheat must compete with the wheat of Argentina in the Liverpool market, and while that country produced but 168,500,-000 bushels last year, the industry there is capable of a much larger development. The principal wheat countries, as shown by the figures of 1915, are the United States, with a crop of 1,011,500,000 bushels, the Russian Empire, except Poland, with a crop of 761,550,000 bushels, British India, whose

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mick, a Virginia youth of twenty-one, and patented three years later, really started this country into the wheat producing business. Likewise it gave the United States a leadership in the manufacture of agricultural machinery that is still maintained in every part of the world.

crop was 376,731,000 bushels, Canada with 376,304,000 bushels, France with 258,000,000 bushels, Austria-Hungary with 209,000,000 bushels, Italy with 170,500,-000 bushels, Germany with 141,000,000 bushels and Spain with 139,000,000 bushels.

"The year before the war, Germany bought 11,000,000 bushels of wheat and 176,000 barrels of flour in the United States, and, of course, would be a heavy purchaser now, had it the freedom of the Atlantic Ocean. In a general way, I have tried to give you an outline of world conditions with respect to wheat."

Will the United States turn buyer itself at some time in the future? No one can answer the question. Nor

do the officers of the Department of Agriculture ever try publicly to answer it. Consumption in this country—seed and flour—just about equals the total production of wheat in France, Germany, Italy and Egypt; or is just a little less than the total production of Canada, Argentina and Great Britain.

North Dakota grew more wheat than Germany, by the figures of 1915. Kansas and Minnesota produced more than the Argentine Republic; Ohio more than Egypt. Pennsylvania harvested nearly as much as Australia. The four big grain States of Kansas, Minnesota and North and South Dakota grew considerably more than Canada.

Are flour prices fair to the consumer? An answer can be obtained with a little simple figuring. There are four and a half bushels of wheat in a barrel of flour. Two hundred and seventy pounds of wheat, therefore, produce 196 pounds of flour. The by-products—bran, shorts and so forth—weigh 74 pounds and are sold in one form and another.

The dramatic and picturesque characters having parts in the anecdotes, legends and chronicles relating to the growing of wheat in the New World start with a negro slave of Cortes. Humboldt says that the slave found three or four kernels of the grain in the rice provided for the Spanish soldiers. The grain was sown in Mexico previous to the year 1530.

An adventurous English navigator, Bartholomew Gosnard, financed by the Earl of Southampton, sailed to America, in 1602, with twenty colonists. On May 15, he discovered a promontory, which he named Cape Cod. Seeing an island in Buzzard's Bay, he landed and called it Elizabeth, to the honor of his virgin Queen. The Indians soon drove him away, it is said, but not before he had sown some wheat, and the first, in the great country to be known, more than a century after, as the United States.

Nine years later, wheat was introduced into the colony of Virginia. George Washington grew wheat, ground it into flour at his mill and shipped a part of the flour to the West Indies. It was so excellent and his weights were so honest that his shipments, contrary to rule, were never inspected. Flour, early in the eighteenth century, was exported from Philadelphia and Baltimore,

the wheat coming from the stump-covered farms of Pennsylvania and Maryland.

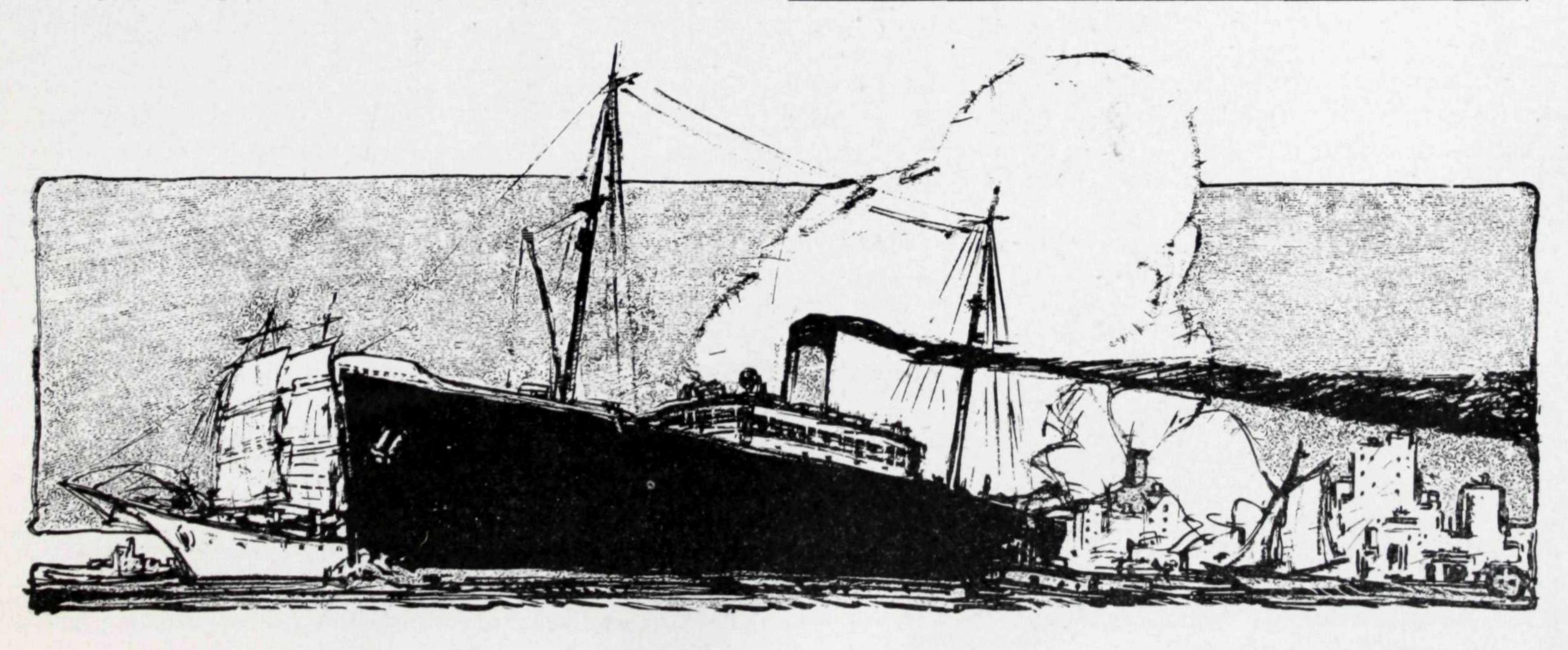
The reaper invented in 1831 by Cyrus H. McCormick, a Virginia youth of twenty-two, and patented three years after, really started this country into the wheat-producing business. Likewise it gave the United States a leadership in the manufacture of agricultural machinery that is still maintained in every part of the world.

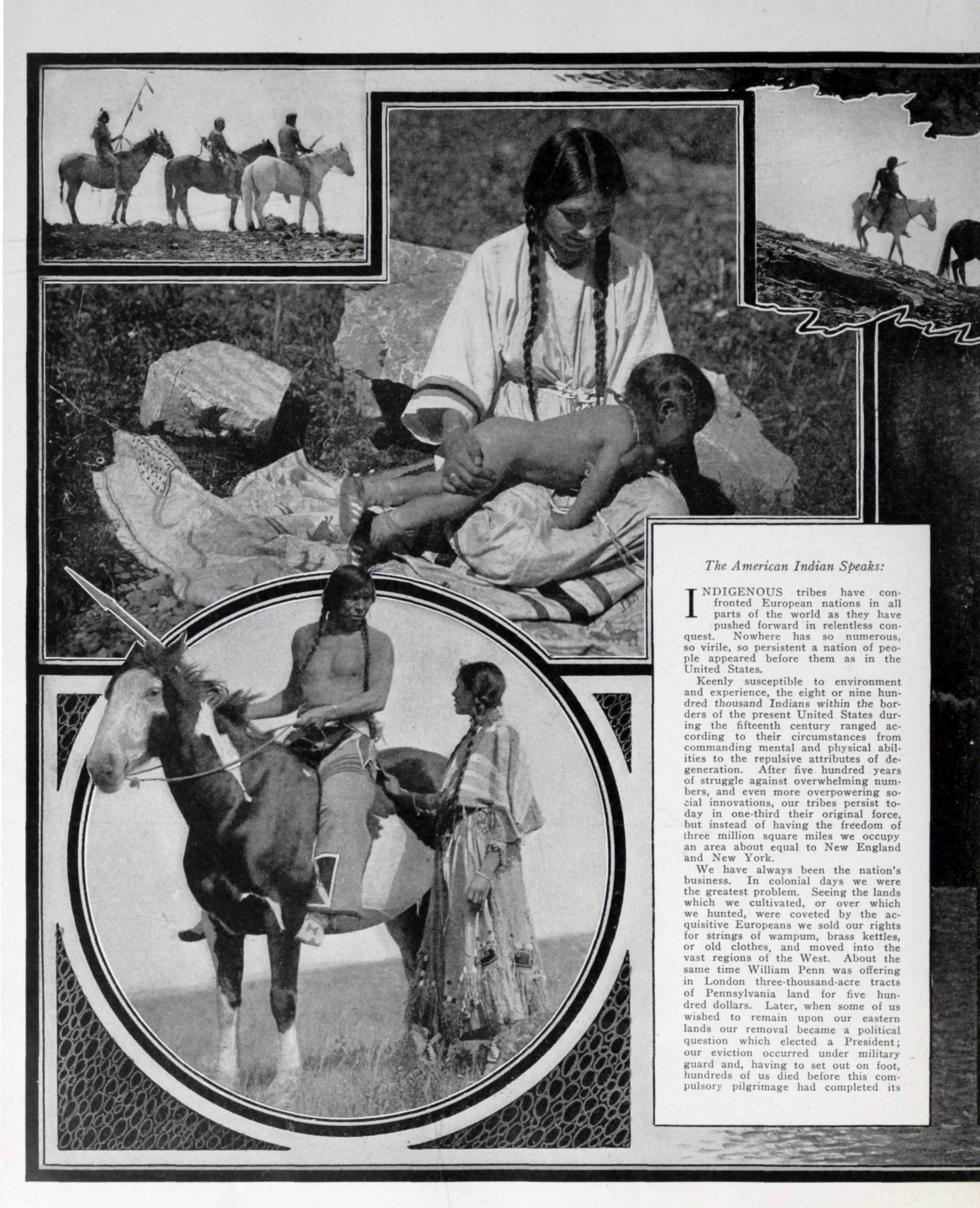
About the year 1873, Russian Mennonites, opposed to war, to oaths in court or anywhere else and to the holding of political offices, settled in the dry and desolate regions of Kansas. In their chests they brought wheat for seed—Turkey wheat and Kharkof wheat. Edgar W. Howe, the Atchison author, wit and philosopher (also something of a fool-killer, incidentally), has just completed an automobile journey through that part of Kansas turned by the Mennonites and their magic wheat into one of the fairest and richest spots out-of-doors.

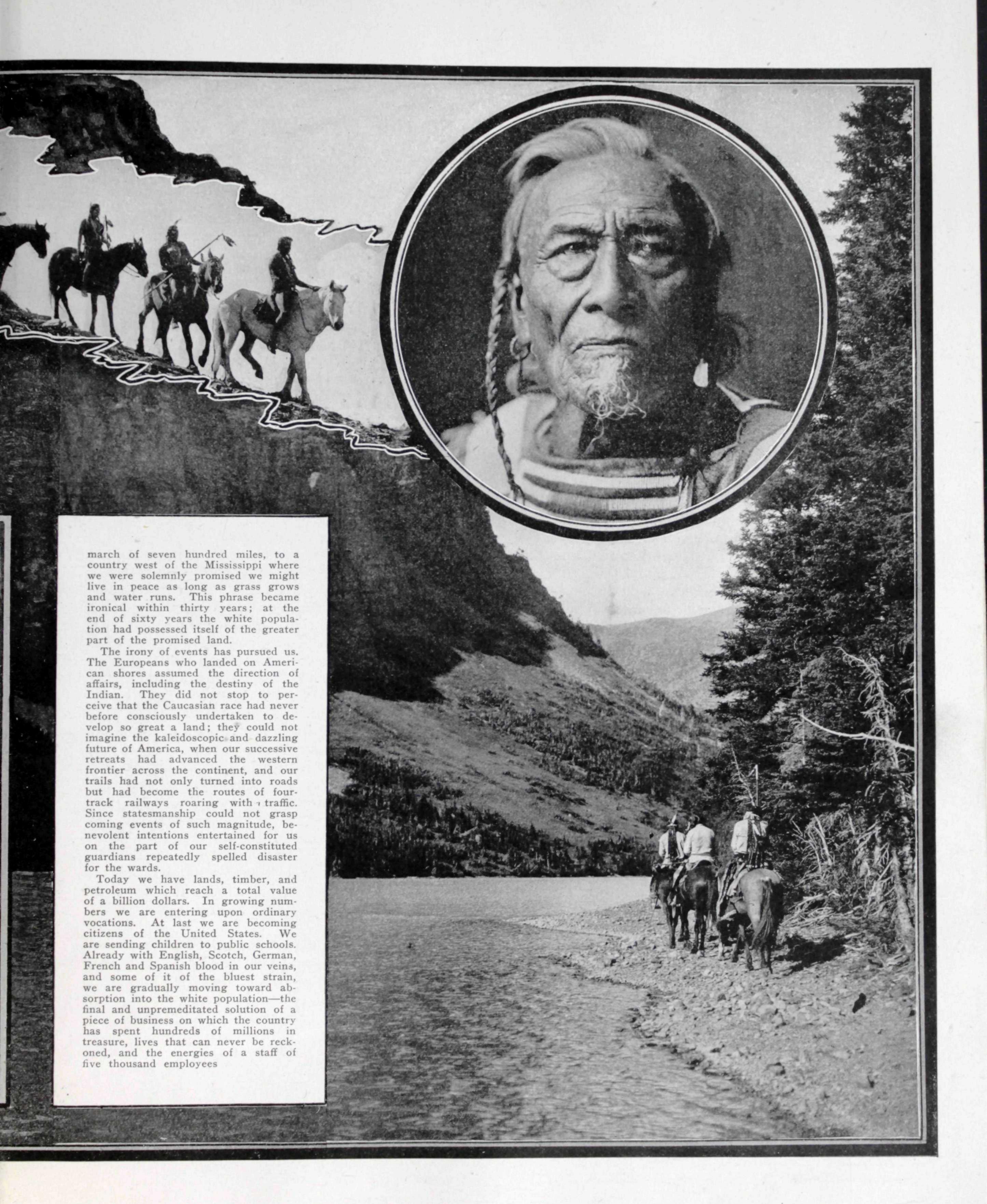
"Farmers," he writes, "not only have automobiles; they have farm tractors and machines that cut and thresh wheat at one operation. Scores of penniless men," he says, "went into that semi-arid section a few years ago and now own farms of thousands of acres; they live in beautiful homes and build expensive high schools, colleges, hospitals, opera houses, factories and banks in their towns."

The slave, the ancient, sworded English navigator, and ruffed as well, no doubt; George Washington, Cyrus H. McCormick and the company of grave and big-hatted Russians are only a few of the characters who give the story of wheat its artistry and romance.

This is the third of a series—cotton, corn and wheat; a fourth, "Concerning Sugar", by Mr. Binkley, will appear in January.







MENYOUKNOW-AND DON'T!

A Vermonter, Whose Hamlet Fixes the Nation's Market for Calfskins Because He Knows His Job, Does this Apostle of Vocational Training

By JAMES B. MORROW

T may surprise Carroll Smalley Page, the Senator in Congress from Vermont and the unchallenged calfskin autocrat of the country, to be informed, as he is by these lines, that when his biography shall have been competently written it will contain an important paragraph about Johann Heinrich Pestalozzi and himself.

A century, almost, and an ocean separated these men, but their relationship, unique and energizing, is plain. Master and pupil they might be called, though Pestalozzi died long before Senator Page was born. Nor is it known whether the American legislator ever heard of the Swiss revolutionist and his far-reaching work.

"The training of the whole man," his mind, his hands and his eyes, was Pestalozzi's new doctrine and self-sacrificing task. Nowadays the principle he established, and to which he gave vitality and movement, is called vocational preparation.

A story of Page, even shortly told, would be empty of strong and needful elements, were mention of Pestalozzi not included. Pestalozzi originated an educational method that spread all over Europe and tardily crossed the Atlantic to America. Page developed the method for himself and used it in his own achievements. The American and the Swiss, in their theories and practices, were strangely brought together by a German tanner.

"Lienhardt und Gertrude, ein Buch fur das Volk," otherwise, in English, "Lienhardt and Gertrude, a Book for the People," made Pestalozzi famous among the Germans. It was published one hundred and thirty years ago. The purpose of the novel was to show what a good woman, industrious, wise and frugal, could do for a dull, careless and slothful village.

Thus Germany, reading Pestalozzi and studying him later, started upon its marvelous career of efficiency—industrial, intellectual and military. It caught up and adopted his system of teaching, which began with observation (the training of boys and girls to note, describe and remember), and then passed on successfully to consciousness, speech, measuring, drawing, writing and reckoning.

But Pestalozzi's main object was to prepare his pupils for the lives which, fitting their talents and circumstances, as well as their limitations, they would probably follow as men and women. And so at Weinheim, near the Rhine, a tanner, Carl Freudenberg, took his son out among the vats and the oak and hemlock barks and then sent him to Vermont that he might learn the calf-skin business from the greatest expert in the world.

The richest and largest calfskin tanners in Europe are Baron Cornelius Heyl of Worms and Carl Freudenberg. Senator Page has sold them raw materials for years. Calfskins from New England, Pennsylvania, Michigan, Kansas, Wyoming, Montana and other states find an outlet to Germany, normally, through the Page warehouses in Vermont. The skins are tanned at Worms and

Weinheim and then are shipped back to the United States, to be fashioned into shoes, which are worn, in some instances, perhaps, by the wives and daughters of the original owners of the calves.

EVERYTHING in Germany is thoroughly done," Senator Page said to the writer of this article. "Their tanneries are made of stone and will stand for ages to come. Ours are built of wood and will burn down from a spark. Mr. Freudenberg and I have talked about the German method of educating boys to be scientists and mechanics and to 'find themselves' while still attending school."

The son, Walter Freudenberg, put on overalls and learned to cure and classify skins. He worked under Senator Page's tuition for six months, "and it was not," the Senator smilingly reminded the writer, "a white-shirt job."

Then, later, Governor Page became a Senator and a prophet of human preparedness. Nations, he says, should be ready to take care of themselves. The common sense of that principle, he argues, is still more logically applicable to the individuals of whom the nations are composed. Self-preservation, by his definition, is personal capability and should be physical and mental. A good carpenter is prepared; a poor lawyer is not.

A man of phrases, Senator Page unveils the mystery of money-making in seven words. "To earn more," he declares, "is to learn more." Achieving men "bore with big augers." Again, sifting a sentence from his blunt philosophy, "Don't let any one throw a monkey-wrench into your separator." Pestalozzi expresses himself differently but to the same end. Anyway, such was the general course of his instruction.

Hyde Park, where Senator Page lives and works, has never had more than 423 inhabitants. Other firms and corporations may do a larger business than he, totaled in carlots and money, but it is his monthly price list—a voice from a hamlet among granite hills—that fixes the market for calfskins in the United States.

WHY can Hyde Park make quotations for Boston and Chicago, St. Louis and San Francisco? Calfskins, ordinarily, by the rule of the trade, are sorted into eight or ten classes. At the Page warehouses they are sorted into ninety. Skins have been sent to Senator Page from Seattle to be inspected and assorted and then have been shipped back across the continent to be tanned at Victoria in British Columbia. Again, the Page survey of conditions takes in Russia, South America and the rest of the world.

"I saw, while still a young man," he said, "that I would have to do business in an original way if I hoped to become anything more than a local dealer. Hyde Park was a small place. Only one railroad came into the town.

ployment in factories, shops and stores. What is being done to discover their aptitudes? Nothing.

All boys, Senator Page believes, should be studied physically, mentally and temperamentally. "We study

horses," he explains, "making roadsters of some and workers of others. Likewise, we study wheat and potatoes."

Here is his idea of a sensible education, as described by himself: "Up at Newton, Mass., each schoolboy is scientifically investigated. His habits, character, parentage, environment, tastes and records as a student are considered in an effort

to ascertain what he ought to take up when he begins to earn his living. A work place is obtained for him when he drops his books, turns his back on his youth and faces life."

The ancient classical idea that elementary education, in all cases, at least theoretically, preconceives a college degree finally for the pupil has, in the view of Senator Page, become ridiculous. A smattering of Latin is no help to a brick-layer. Trigonometry has nothing to do with selling goods, making fences or repairing automobiles.

Let T me give you a fact that is unknown to most persons," he said. "Only seven in every one hundred pupils of our rural, village and city schools pass beyond the elementary grades.

"In other words," he continued, "only seven pupils in a hundred enter our high schools and colleges. The ninety-three who are learning to read and write, to add, subtract, multiply and divide, are not getting any training whatever that will aid them in earning their bread and butter. Among them, I grieve to say, are those who will fill our jails and asylums, or those who will become restless and dissatisfied American citizens. I assert that

the ninety-three are not getting a square deal.

"Nor are the girls treated any better," he went on to say. "The great mass of our girls, like our boys, leave school while in the lower grades. They are to be the wives of the boys who are being neglected under our absurd and defective educational methods. "What is being done to fit them for wifehood and motherhood? Nothing. They learn to read and to write. That is necessary. But they should be taught

"Calfskins, in normal times, that I buy in Ohio, Missouri, Texas and elsewhere, go through my warehouse to Germany. Coming back, they pay a heavy duty, and, under the name of French enameled leather, are manufactured into high priced shoes for the men and women of the United States.

"Yet we brag of our ability in business and the next moment point with vanity to our obsolete system of educating the young. We want to conquer the world commercially, industrially and financially, but seemingly we expect that most of the boys in the public schools are to make lawyers, physicians, clergymen, and professors of themselves and that the girls are to marry them and, like the lilies of the field, are to toil not but are to live happily ever afterwards." cooking, baking, sweeping, gardening, how to nurse the sick and bring up children. They ought to understand food values, hygiene, ventilation and disease prevention.

"Under our antiquated and worthless system of education it is supposed that the boys and girls who enter the public schools are to be graduated at colleges and universities. They are trained accordingly.

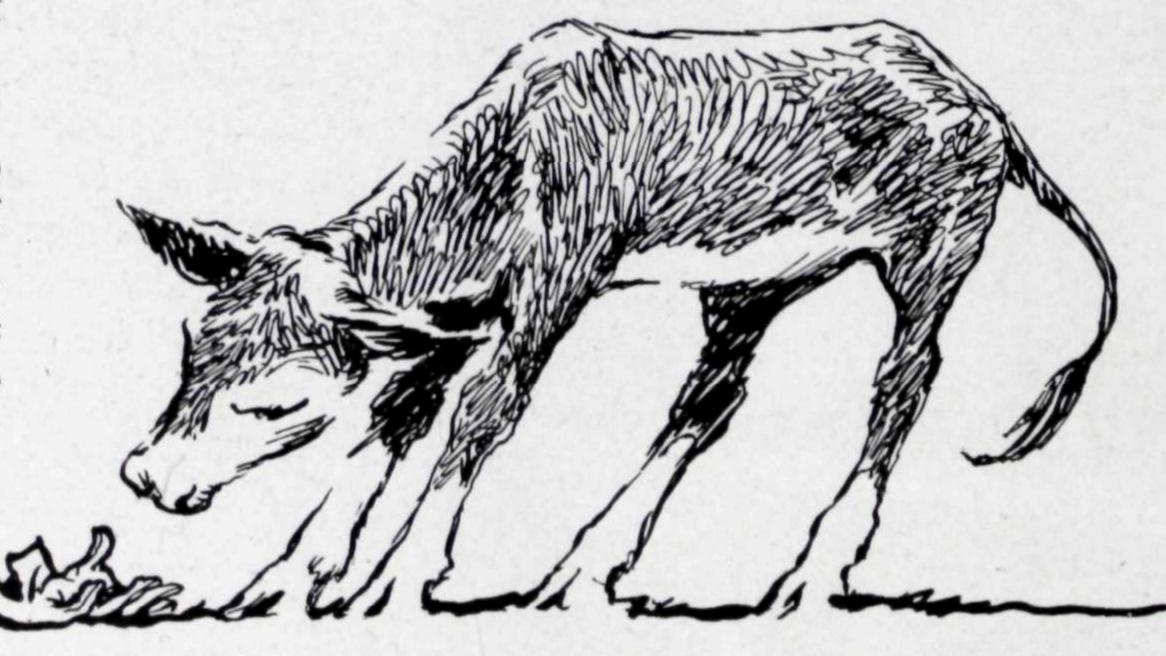
"As a matter of fact, most of the boys are to be farmers, clerks and mechanics and most of the girls housekeepers, stenographers and workers in stores and factories. False educational ideas have no standing in Germany and that great and practical country before the war was exporting hundreds of millions of its products and was rapidly becoming the most important industrial nation on earth.

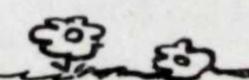
EVERY German boy learns a trade. The Emperor is a shoemaker, a carpenter or a stone-mason. Calfskins, in normal times, that I buy in Ohio, Missouri, Texas and elsewhere, go through my warehouses to Germany. Coming back, they pay a heavy duty, and, under the name of French enameled leather, are manufactured into high-priced shoes for the men and women of the United States.

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themselves and that the girls are to marry them and, like the lilies of the field, are to toil not but are to live happily ever afterwards."

And Senator Page, a slender man, with light and youngish brown eyes and a short, white beard, smiled indulgently at the follies of his countrymen.





The New Romance of Shipping

John Silver, of Today, Finds His Treasure Island Not in the South Seas, but in American Ship-Building Yards

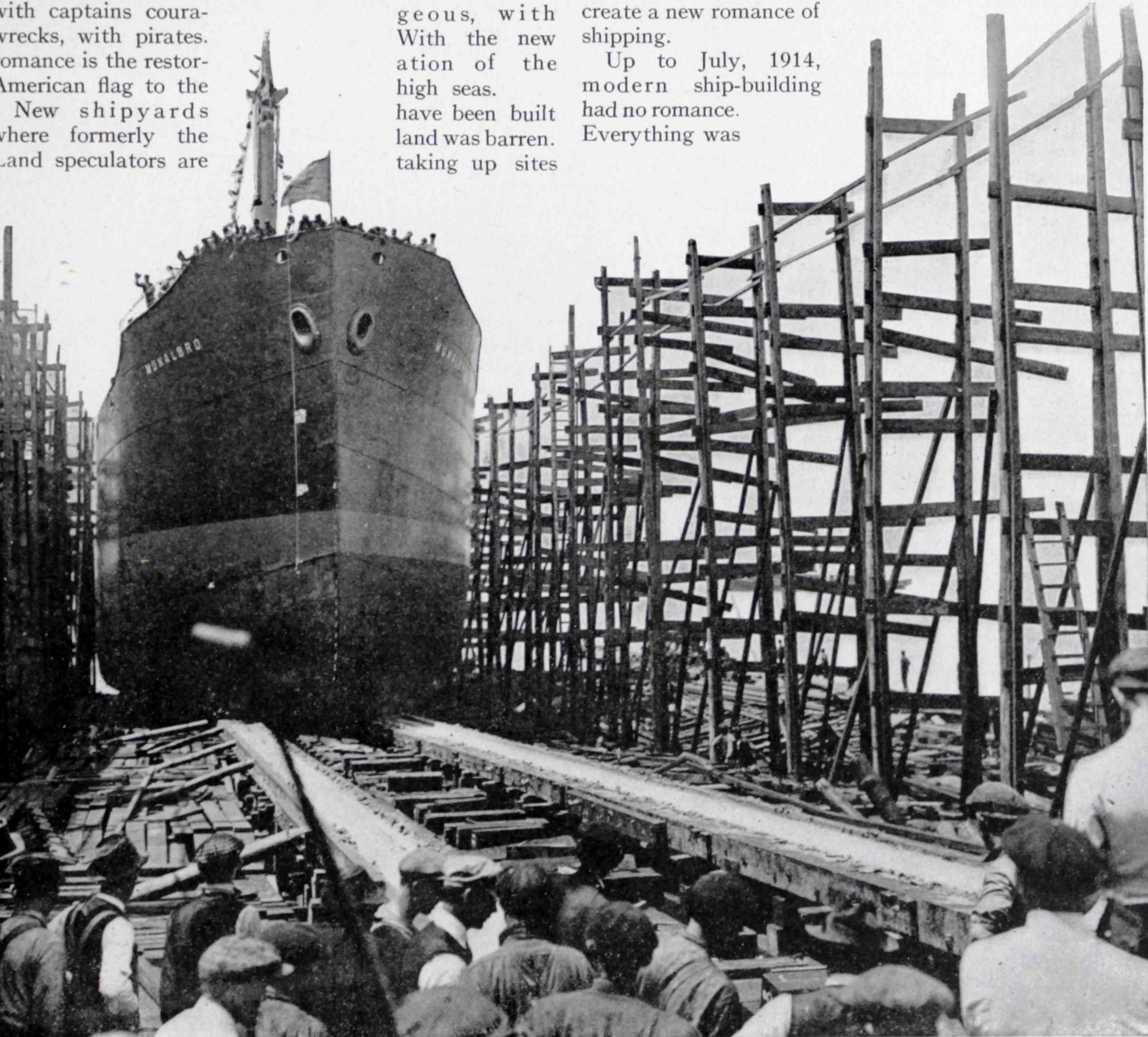
By GEORGE WEISS

THE staccato notes of the riveting machines are ringing once more in American ship yards. They announce that the romance of the new American shipping is taking place on land.

Until recently, we expected a writer who turned to the sea for romance to go back to the days when steam was in its infancy, when the world's sea-borne commerce was carried in sailing ships. His stories were woven about the careers of clipper ships, barks and brigantines, and had the tang of the salt.

being spun on shore. The old romance dealt with ships with captains courawrecks, with pirates. With the new romance is the restoration of the American flag to the high seas. New shipyards have been built where formerly the Land speculators are taking up sites

having the advantage of deep water, good labor facilities and close proximity to the steel mills. The old shipbuilding ways of the Civil War are again in use along the Kennebec. The old yards on the Delaware, in New York harbor, at Baltimore, at San Francisco, at Seattle, at Long Beach, have been rehabilitated. Feverish activity is reported from the yards at Philadelphia and Newport News. Vessels are now being rushed to completion in more than seventy-five shipyards. All this, with the high rates that are obtained by those who own vessels and The ship romance of today is not on the high seas. It is the revival of an earnest effort to bring about the establishment of a real American merchant marine, tend to



Launching of steamship "Munalbro," of the Munson Steamship Line, at Newport News, Va., where she was built by the Newport News Shipbuilding and Dry Dock Company. During the nine months ended in September, American shipyards completed 846 merchant vessels of 361,113 gross tons, compared with 1,026 vessels of 154,086 gross tons for the corresponding 1915 period. Thus far this year five steel steamships of 17,203 gross tons have been built for foreign owners.

mechanical. Ships left port on certain days and arrived at their destinations on schedule. But when Von Kluck's army started on its march across Belgium in its race

towards Paris, and Britain declared war against Germany, world shipping was paralyzed. Trade routes were disorganized. Every German trading ship scurried to port for safety. British vessels were tied up for fear of German commerce destroyers. For fully a month ocean transportation ceased. Then came Britain's famous cordon across the Atlantic. The ocean lines were opened and the confidence of ship owners was restored. But trade had stopped, shipping rates fell and for three months freight rates were below the normal. Hundreds of ships were tied up for lack of freight. World war meant world disaster to business, shipping men thought.

Slowly it began to dawn on shipping men that the

Entente Allies and the neutrals of Europe were dependent on the United States for supplies, and that shipping, instead of being an industry blighted by the war, was destined to enjoy unexampled prosperity.

At once, some of the more daring began to charter vessels for long periods. Rates were then about 4 shillings per ton per month. Slowly they began to move upwards until finally they reached the dizzy figure of 45 shillings per ton per month. Those who had chartered boats for a limited period, rechartered them to others at the higher rates. The second largest merchant marine in the world—that of Germany—was tied up. It became apparent that a world wide shortage in ocean facilities existed.

Then trade bodies all over the country began to clamor for the removal of the statutes which forbade the transfer of foreign built vessels to the American flag. Congress

moved rapidly. On August 18, 1914, only fourteen days after Britain had declared war, an emergency law was passed, enabling Americans to purchase and register vessels under the American flag. Even this, however, did not very much increase the supply of tonnage. The immediate shifting of ships from one flag to another did not relieve the situation.

Then began the demand for new ships. Ocean freights were soaring. Tonnage that, before the war, could be obtained for \$60.00 a ton, changed hands for \$100 a ton.

A Boston firm started the ball rolling. It ordered five large colliers. Scarcely had the vessels been placed in service when they were sold to another American shipping concern at a 25%

profit. Orders for new vessels literally began to pour in on the shipbuilders. Along the Delaware, the Cramps and the New York Ship Building Company quickly filled their slip ways. At Baltimore, the Maryland Steel Works and the Spedden Yard found that business was in excess of capacity. The Fore River and Newport News yards were quickly loaded up with orders. Some of the Atlantic Coast interests even reached out towards the Pacific and placed orders at San Francisco and Seattle.

The ship speculator had begun to ferret everywhere for tonnage. Steamers, old square riggers and fore-and-aft schooners and other antique craft were fetched from the seven seas. Then the fine coastwise steamers were seized upon. Their owners were paid rates that yielded



Except for the modern dress of the man and the boy, this ship-building scene might have been "lifted" from ancient Greece instead of being, as it is, a sight often witnessed to-day in the Greek islands, where the method of boat building has scarcely changed in 2,000 years. In this case, logs were dumped on the shore near the sea, and three men hacked the wood into shape with primitive tools. Note the cross on the stem. The merchant fleet of Greece, in 1915, had 788 sailing vessels of 136,680 tons and 493 steamers of 860,438 tons. A considerable amount of the carrying trade of the Black Sea and the Eastern ports of the Mediterranean is under the Greek flag.



The Newport News water front. This yard looks out with pride on its work whenever the United States Navy rides, safely at anchor, in Hampton Roacres, including shops, wharves, dry-docks, shipways, and offices, are lighted by electricity so

more in one round trip than they had earned in six months of ordinary business.

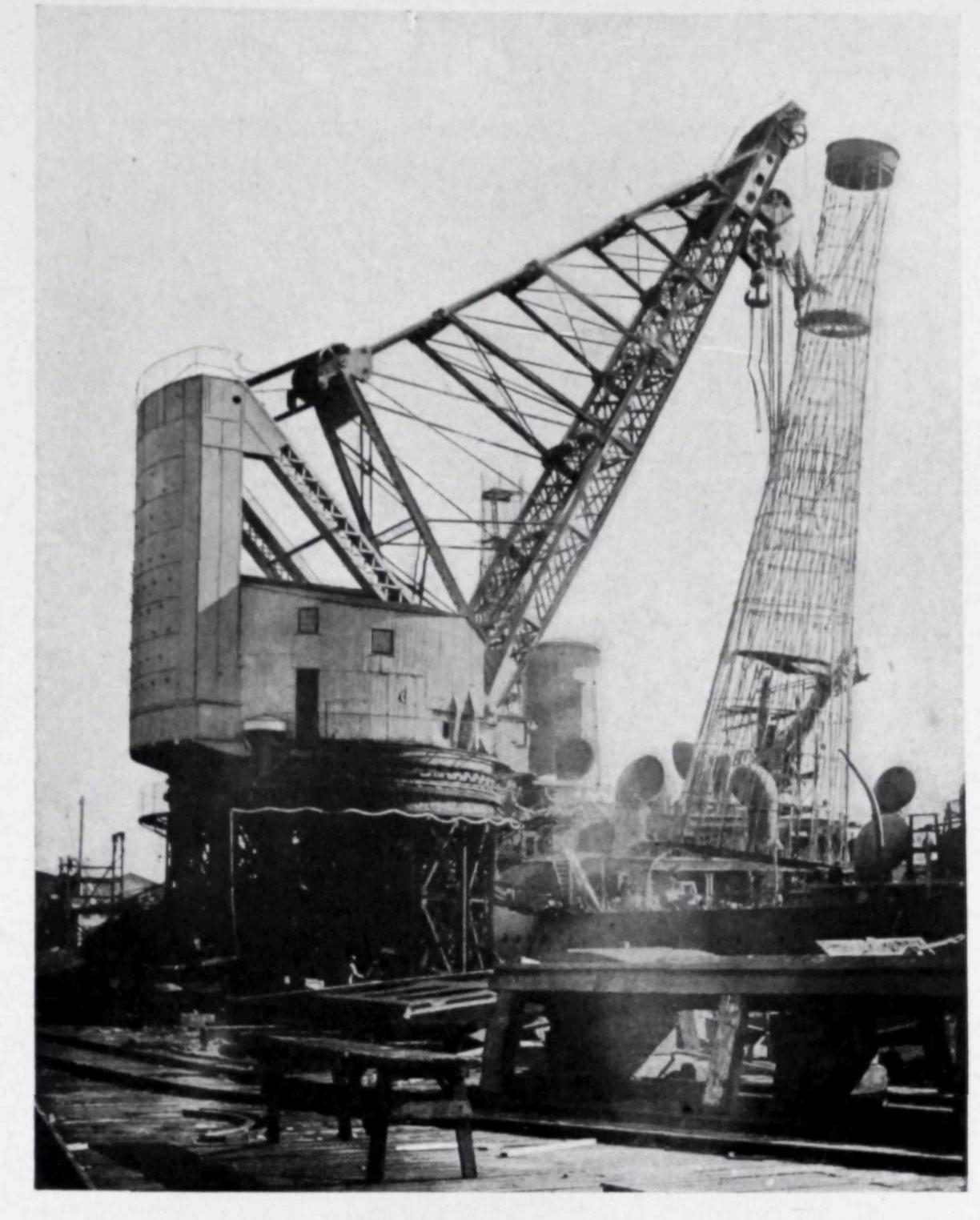
The underwriters would not insure coast schooners for trips across the Atlantic, but they would permit them to run to South American ports. Welsh coal needed for the British Navy could no longer be sent to Latin America. Appeal was then made to American coal producers and many steamers were employed to take coal to Brazil, Chile, Argentina and Peru.

This released the steamers on the South American lines for more profitable trans-Atlantic trade. Schooners that for years had carried coal between Norfolk and New England at \$1.00 a ton began to earn \$10.00 a ton carrying fuel to South America.

it reached \$20.00 a ton.

Then Maine awoke. The shipyards of our forefathers, that were rotting away, once more became beehives of activity. Wooden shipping was not a lost art. When the sound of the hammer again rang along the Kennebec, the old ship workers reappeared like magic. The building cradles were restored. Frames were ordered by rush wire from Nova Scotia and spars from the Pacific. Europe's misfortune had brought back the memories of the days when families having "shares" in sailing vessels

This price rose steadily until



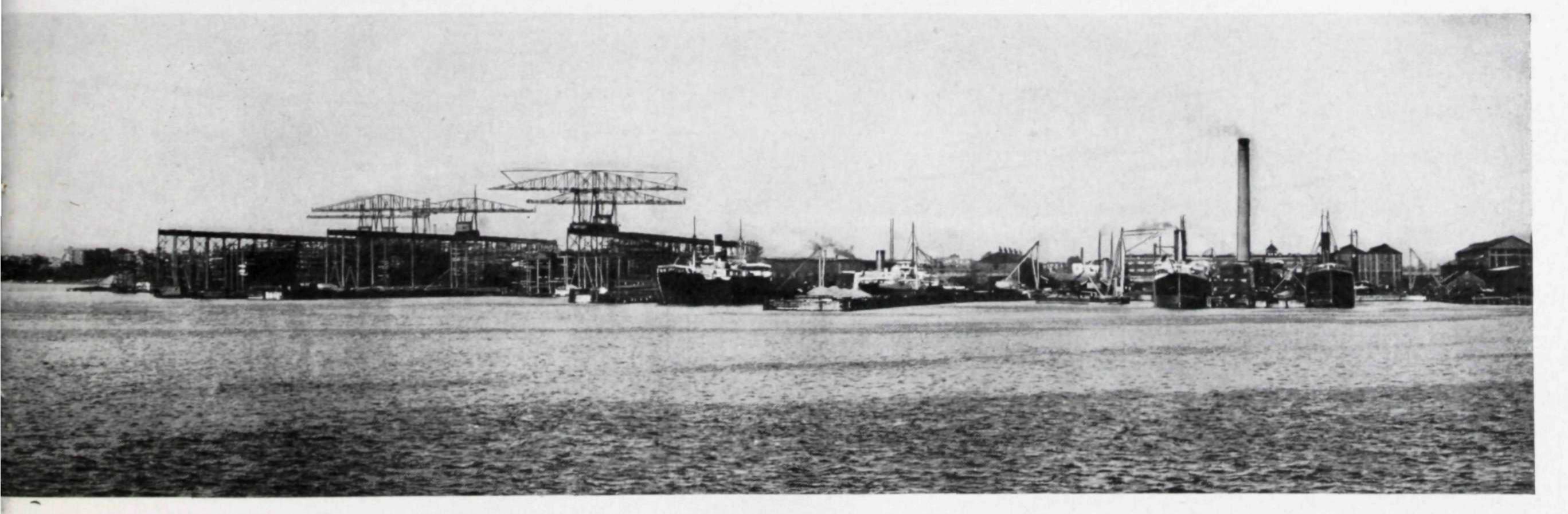
An important auxiliary of the Newport News shipyard is the 150-ton electrically-operated revolving derrick "Hercules", one of the largest in the world. This mighty crane, operated by one man, picks up the complete stern of a vessel and delivers it to the point of assemblage.

were the wealthy families. Some of the Maine shipyards built 2,000 ton schooners in the incredibly short space of three months. The sail maker again came into his own and all joined in upbuilding the new American merchant marine.

While Maine's contribution of wooder. ships is large, the shipyards producing vessels in steel are the greatest factor in restoring American prestige on the high seas. During the past year no less than fifteen new shipyards have sprung up on the Atlantic and Pacific. Every one of them very quickly obtained orders enough to absorb their entire capacity to the end of 1917. The American International Corporation, which had been diligently seeking for

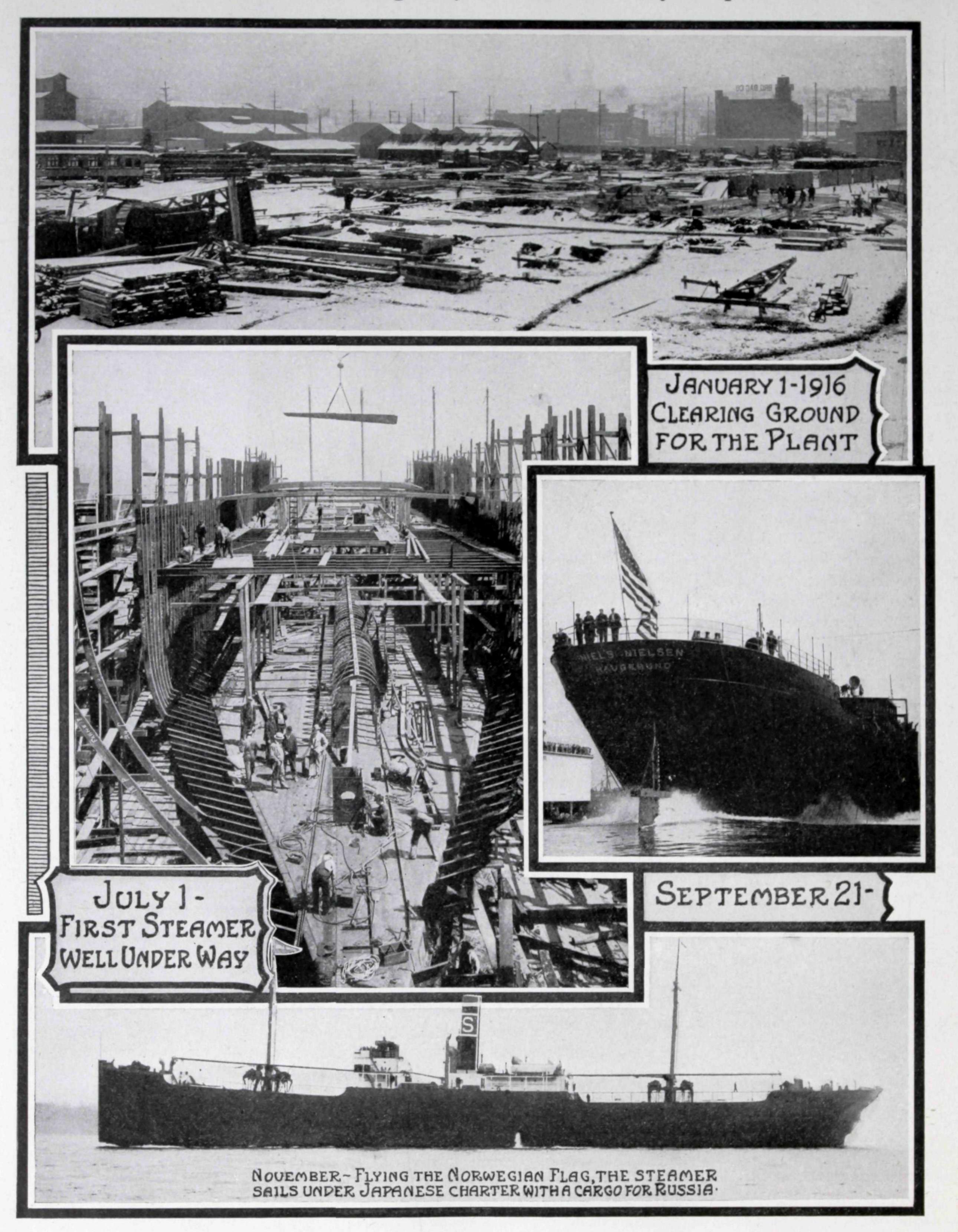
a year to buy a shipbuilding plant, succeeded in acquiring control of the New York Shipbuilding Company's yards and equipment. All of the old shipyards have extended their capacity and the new ones have most ambitious programs. The Sun Shipbuilding Company at Chester, Penna., plans to erect nine shipbuilding ways. The Cramps Yard has been enlarged. Mr. Schwab bought the Fore River plant and the Union Iron Works and the Maryland Steel Company, and his confidence was justified.

Contrary to the most confident beliefs of business men, ocean steamships of today are being again constructed of



he great depth of water in the harbor and the small range of the tide permit a ship to dock at any hour of the day. The entire shipyards, covering 160 and be carried on day and night. The immense plant represents an investment of about \$20,000,000.

FROM A VACANT LOT TO THE HIGH SEAS IN TEN MONTHS A Hurry-up Industrial Movie Staged by the Skinner-Eddy Corporation at Seattle



wood. Prices on steel having advanced two- to threefold, and steel mills being rushed to capacity, ship buyers could not get quick delivery unless they consented to wood construction. At Seattle, Washington, the Alaska-Pacific Shipbuilding Company is building six wooden motorships, each with a carrying capacity of 1,500,000 feet of lumber, in addition to the equipment for 75 passengers. The Anderson Steamboat Company in the same city is building four lumber schooners with auxiliary engines. The J. D. Barnes Shipbuilding Company in Alameda, California, is building two wooden motorships, while in San Pedro, Charles E. Fulton is constructing two wooden schooners with auxiliaries, and in Seattle the Hanlon Dry Dock and Shipbuilding Company has three five-masted barkentines with oil engines. Steel construction is also active on the Pacific. The Moore and Scott Iron Works in Oakland has five steel steamers on the ways and has just contracted for nine more. The Union Iron Works in the same place is building twentyseven large steamers. The Washington Shipbuilding Corporation in Seattle has seven already begun.

N the Atlantic wooden construction is entirely in sailing vessels. Shipyards at Philipsburg, Camden, Rockland and Bath, Maine, Baltimore, Md., Brunswick, Ga., Beaumont, Texas, and Milford, Delaware, are turning out schooners. Early in 1915, a pool was formed, and the old Roach shipyard was purchased and rehabilitated. The Chester Shipbuilding Company emerging as a brand new enterprise, within three months had received contracts for fourteen steamers. The Sun Oil Company found that it could not buy tank steamers, so the Sun Shipbuilding Company was formed, and a monster plant is being hurried to completion at Chester, Penna. The Mexican oil interests have taken over the Marvel Shipyard at Newburg-on-the-Hudson and have begun work on improved oil tank steamers and tank barges. The Texas Steamship Company, formed by the Texas Oil Company, has taken over the Arthur Sewall Yard at Bath, Me., and is building four large tankers there.

At the head of the list of large ship buyers stand the Norwegians. They have placed orders in astounding numbers in practically every new shipyard in this country, and have earned tremendous profits. Some of their companies have paid dividends as high as 375%.

American steel mills are now enlarging their equipment, so that their capacity will be doubled. The enormous plant of the Worth Bros. Co., the Lukens Iron and Steel Company, the Carnegie Steel Co., and the Cambria Steel Company are in the midst of elaborate extension programs, costing upwards of \$50,000,000. The competition of English shipyards has been practically eliminated. All their resources have been turned to war requirements. Only a few have been permitted to resume work on merchant vessels.

Scandinavian and Dutch ship owners, finding that they could not get delivery from British shipyards for several years, have come to this country for their vessels. The Scandinavians have, in a number of instances, taken over the bulk of the capacity of our new plants. Behind the present boom is the idea of putting American shipbuilding on a sounder economical basis than it has been since the days of wooden ships.

The new era in American shipping has arrived. The romance of earnings in carrying the water-borne commerce of the world is almost beyond belief. Ships are earning their entire construction cost in single voyages. Coasting schooners that cost \$30,000 to build have earned \$20,000 in a single voyage. Steamers sent to Archangel have come back with their entire construction cost paid. The American-Hawaiian line is receiving \$190,000 a month for the use of some of its vessels to carry manganese ore from Brazil to this country.

ONE incident in the romance of the new shipbuilding—there are dozens of them—will illustrate the race for shipping and the enormous profits therein.

Early in 1915 it was ascertained that England would not object to the shipment of cotton to Germany. Twenty-five cents a pound for all the cotton that could be landed in Bremen was what the Germans offered. A Texas cotton grower was told that he could turn his cotton into heaps of gold by sending it to Germany instead of being content with receiving merely a cost price from the American mills.

Perhaps, he reasoned, he could sell cotton to Germany without going there himself. The Texan came to New York. He tried to charter a wooden ship. None was available. A ship broker, however, offered him an old square rigger, about forty years in service. The price was set at \$90,000. It cost \$35,000 to build. The ship broker expected a counter offer and put the price high. The Texan, not knowing the tricks of the trade, accepted the boat at the price asked, took his boat and sent it to Galveston. There he loaded 10,000 bales of cotton. The captain was told to make all speed for Germany. If the trip was made in thirty days he was to receive a bonus of \$1,000 and each of the crew a bonus ranging from \$200 to \$500.

The ship did arrive at Bremen. The cotton sold for twenty-five cents a pound. The Texan received \$840,000 more for the cotton than if he had sold it in this country. The 10,000 bales were worth \$410,000 here. In Germany they were worth \$1,250,000. The Texan then balanced his accounts. The vessel cost \$90,000, cargo \$410,000, operation \$10,000, a total of \$510,000. The cotton sold for \$1,250,000, yielding a profit of \$740,000. The boat was now free and clear, having paid for itself, but it was in Germany. He had to bring the vessel back here in ballast and shipping men said that would cut into the profits. The Texan had gained experience. American cotton mills were in need of German dyes. He went to one of the large color importers in New York and offered the use of the vessel at a rate of \$15 a ton. It was accepted. The boat brought back 6,000 tons of colors yielding a homeward freight of \$90,000. The net profit for the round trip was about \$830,000. The Texan shipped four cotton cargoes to Germany and brought back as many cargoes of dyestuffs. On the fifth trip the boat was sunk by a mine. He secured his war risk insurance.

THESE are only the high spots. No longer is it the tang of the sea that furnishes the romance. Since the United States became the supply depot of the world, the romance of the new shipping has been on land.

Mr. Commercial Attaché: Representing Uncle Sam

He is a National Traveling Salesman and His Territory is All Creation

By Anselm Chomel

OU wouldn't have given the Peruvian a second glance except for the large and cumbersome lock which he carried in his hands. As he laid it on the desk of William F. Montavon, American commercial attaché at Lima, you might have detected a little ner-

vousness on the part of Mr. Montavon until he saw that the thing was what it purported to be, a lock.

A lock of South American manufacture is likely to promise more security than it really affords; it is likely to be, as this one was, big and clumsy and formidable-looking, but, tap it with a hammer, and you may find that it is after all a pretty flimsy affair.

This, however, was no ordinary lock. Its virtue lay not so much in the fact that it was a barrier between a possible intruder and the treasure that he coveted as that it was designed to discourage

the intruder and turn him aside from his purpose. It might, in fact, have been called a psychological lock, being intended to inject fear into the heart of one tampering with it unlawfully.

It was so constructed that if one attempted to open it with the wrong key, a cartridge was discharged, creating in the mind of the intruder a strong impression that he had been detected and was now the target of a gunman.

The inventor was ready to guarantee that at this point the intruder would experience a change of heart.

The man who carried the lock into Mr. Montavon's office was the inventor. He explained its good points to the attaché and told him that he wanted the United States Government, through the attaché, to interest American capital in its manufacture. Furthermore—and this was an important matter—he would like to receive an advance payment of royalty from Mr. Montavon.

Foreigners, however, are not the only ones who do not understand the functions of the commercial attachés. There was the case, for instance, of the manufacturer in New York City who recently wrote to Pierce C. Williams, commercial attaché in London, to the effect that he was enclosing a dollar with which he desired the attaché to purchase a supply of nursing bottles such as where sold in the British market. The attaché replied

that the dollar mentioned was not enclosed, and that even had it been, he could not have undertaken a commission of the kind.

The commercial attachés, business experts, appointed in the late summer of 1914 after examinations conducted

by the Civil Service Commission and the Department of Commerce, are the newest governmental device to aid in the extension of our foreign commerce.

> Of course, both nursing bottles and locks might become -are, in fact, at this timeproper subjects for investigation and report by commercial

> So many of those South American locks are so flimsy that the people place but little dependence in them, and hence locks are an important part of the large importations of hardware into South American countries. Strangely enough, while we have sold more hardware than any other country to Australia (more than even England has sold her colony) both England and Germany have been beating us in the hardware trade with South America. Just now all the commercial attachés are making special investigations of the hardware trade in the countries to which they are assigned, and doubtless Mr. Montavon and the other attachés in South Amer-

attachés.

Three of our commercial attachés stalking trade. They are—left to right—Julean H. Arnold, Peking; Pierce C. Williams, London; Albert Hale, Buenos Aires. An attaché's day is full of color—he may raise an embargo on American citrus fruits, confer with a prime minister, get a thimbleful of dirt from the Great Wall of China for a woman in Arkansas and buy nursing bottles for American manufacturers.

ica will offer expert advice to American manufacturers as to how to sell more locks to South Americans.

On the other hand, some foreign countries have, as a sanitary measure, enacted laws prohibiting the use of nursing bottles with tubes. When a matter of such general interest to manufacturers of nursing bottles arises in a foreign country, the attaché may be expected to report on the types of bottles permitted under the new laws.

We have commercial attachés in London, Paris, Berlin, Petrograd, Rio de Janeiro, Buenos Aires, Santiago, Chile, Lima, Peking and Melbourne. Before going to their posts, the appointees make a brief tour of the principal business centers of this country to confer with business men interested in foreign trade in order to learn of the needs of American manufacturers for export.

These men, liberated as far as possible from "red tape" and office routine, are the only resident American government representatives who devote their whole time to the expert study of commerce from the viewpoint of the American business man who wishes to sell in foreign fields. Their work supplements that of the consuls, who, while they report on trade conditions and trade opportunities, can give only a portion of their time, occupied as they are with a multitude of other duties, to investigating business conditions.

The attachés travel extensively. Henry D. Baker, formerly stationed in Russia, and his successor, commercial attaché W. C. Huntington, for instance, have visited most of the principal business cities in European Russia, while C. W. A. Veditz, who has France, Spain and Switzerland as his assignment, has made frequent trips through those countries. The former commercial attaché in Rio de Janeiro, Lincoln Hutchinson, and the present attaché. W. C. Downs, have traveled thousands

of miles through their territory. It is the constant endeavor of the attachés to keep in touch with industrial and commercial conditions throughout the countries to which they have been sent. It is their business to observe the trend of opinion in business and in public life and report the result of their studies for the benefit of the American business public.

The four attachés in Europe have cooperated with the State Department in relieving American exporters and importers from the hardships of the contraband and embargo measures of countries at war. The attaché at Petrograd was constantly in touch with Russian officials and with the Russian trade section of the New York office of the Bureau of Foreign and Domestic Commerce, and, as the result of these activities, upwards of a million dollars' worth of merchandise was released. In like manner, the attaché at Berlin who, under stress of war conditions, has had to spend a great deal of time

in Holland, centered his efforts on helping to overcome the ever-changing difficulties of the American merchants whose goods were held up.

The need of a system of American branch banks in foreign countries led to the incorporation of a provision in the new banking and currency act permitting such branches, and the Bureau of Foreign and Domestic Commerce sent a special agent to South America to investigate the banking situation. The commercial attachés have submitted valuable reports giving information required

The att Russia wh him a commerce sent a special agent to South America to investigate latest many year 1846.

America

by American bankers considering the establishment of foreign branches. Preliminary reports have likewise been made on investment opportunities, and on the strength of these some of our strong financial concerns have sent out representatives to make further reports and to close contracts. At the present time, the Bureau is sending out two special investigators, one to South America and the other to the Far East, to continue these investigations of investment opportunities.

It is fortunate that, coincident with the growth of interest in commerce in South America, Spain, China, Russia and Australia, the Department of Commerce has had its own representatives permanently in the field. The attachés not only supply information to business men; their efforts often actually bring business to this country.

trips through those countries. The former commercial attaché in Rio de Janeiro, Lincoln Hutchinson, and the present attaché, W. C. Downs, have traveled thousands tracts in the Department of Sanitary Works in Argentina.

We did not get the businessmerely because the American firms were unable to guarantee delivery at a stated time on account of lack of shipping facilities. The fact that American coal has of late moved in large quantities to Spain is due largely to the attaché in Paris.

"What comes in a commercial attaché's mail?" is one of the interesting chapters of the story of Uncle Sam's business diplomats.

There is the woman in Arkansas, for instance, who is collecting dirt from the historic spots of the world, and who wrote to Julean Arnold, attaché in Peking, asking him to send her a thimbleful of dirt from the great wall of China.

Then there is the man from Indiana. All his life, so he wrote to Mr. Arnold, he had been saving money for a trip around the world. Misfortune, however, swept away his savings and the world-encircling voyage was out of the question. But he was determined not to be robbed of all the joys of for-

Commercial Agent W. A. Graham Clarke, of the Bureau of Foreign and Domestic Commerce, is not setting out on an Arabian-Nights adventure; he is carrying the romance of American business into India. The commercial agent is the ally of the commercial attaché in drumming up trade for Uncle Sam.

eign travel, and in order that he might have at least one of its thrills, asked Arnold to send him a collection of hotel "stickers" with which to decorate his suit case.

The attaché at Petrograd had a correspondent in Russia who wanted him to write to Washington to get him a complete set of American postage stamps for his album, and another who wanted him to find out the latest market quotations in the States for a cent of the year 1846.

American manufacturers introduced milk to China.

There is no dairying industry in the country, and until about twenty years ago the value of milk as a food was unknown to the people. Then came an American manufacturer with some tins of condensed milk and told the Chinese that it was good to drink. They tasted it and liked it and then began to buy it, with the result that millions of tins of condensed milk are sold every year. Although American manufacturers created the market, they do not enjoy a monopoly of it, but have to share it with Switzerland and other European countries.

Recently an American firm introduced a new nursing bottle. A Chinaman who got one of them came back to complain that the condensed milk would not flow through the nipple of the bottle. The American salesman filled the bottle with water and then, tilting it slightly, called the Chinaman's attention to the fact that the milk flowed freely.

"Ah, I see," said the Chinaman, "you tilt the bottle." The style of hair ornaments worn by women in Foo-Chow is determined by the style and size of the tins in which the Standard Oil Company sells kerosene in China. A new style of tin cans in the United States means a new style of hair ornament in Foo-Chow.

There is a brisk trade in these tins in China. They are used in the making of various articles useful to the Chinese, such as tea pots; hair ornaments, which, cut in attractive designs and polished until they resemble silver, are really artistic; and utensils of various kinds.

A luminous chapter on America's lost opportunities could be written from the journals of our commercial attachés. In a sub-division could be told the story of how foreign trade has been "crammed down the throats", so to speak, of some American concerns.

There are a million cotton spindles in China, all "made in England". In a conversation with Chow Tsz-Chi, minister of commerce and agriculture, Mr. Arnold asked why it was that the British had a monopoly of this trade and why Americans couldn't secure a portion of it.

"We are willing to consider your machinery," replied Chow Tsz-Chi, "but the trouble is that we have had no opportunity to learn about it. Why don't your manufacturers tell us what they have to sell?"

Mr. Arnold reported his conversation to the Bureau of Foreign and Domestic Commerce, which, getting also the report of one of its special agents, passed the information on to American manufacturers.

One concern sent a representative to China, at a cost of

several thousand dollars, but without entertaining much hope that he would get a contract.

"The government has been pestering us so long that we have at last sent a man to China," explained the firm.

The concern was willing, however, to show its goods, with the result that its representative left China with an order for equipment for two cotton mills, the sale amounting to nearly a million dollars.

The commercial attachés

complete the chain of service of the Bureau of Foreign and Domestic Commerce. There are now these district officers, in addition to the traveling special agents and commercial agents and trade commissioners in foreign countries, just as there are district officers and traveling agents within the United States. When the Bureau begins an investigation, it is prepared to see it through to the end.

A NEW type of investigation was made during the past year, all the attachés having been instructed to prepare reports on the hardware trade. Funds were allotted for the purchase of samples, with the result that the Bureau is publishing one of the fullest trade reviews ever issued and has in its sample room in New York the most complete exhibit of competitive goods found in foreign markets that has ever been made in this country. This investigation is the first of a series along the same line.

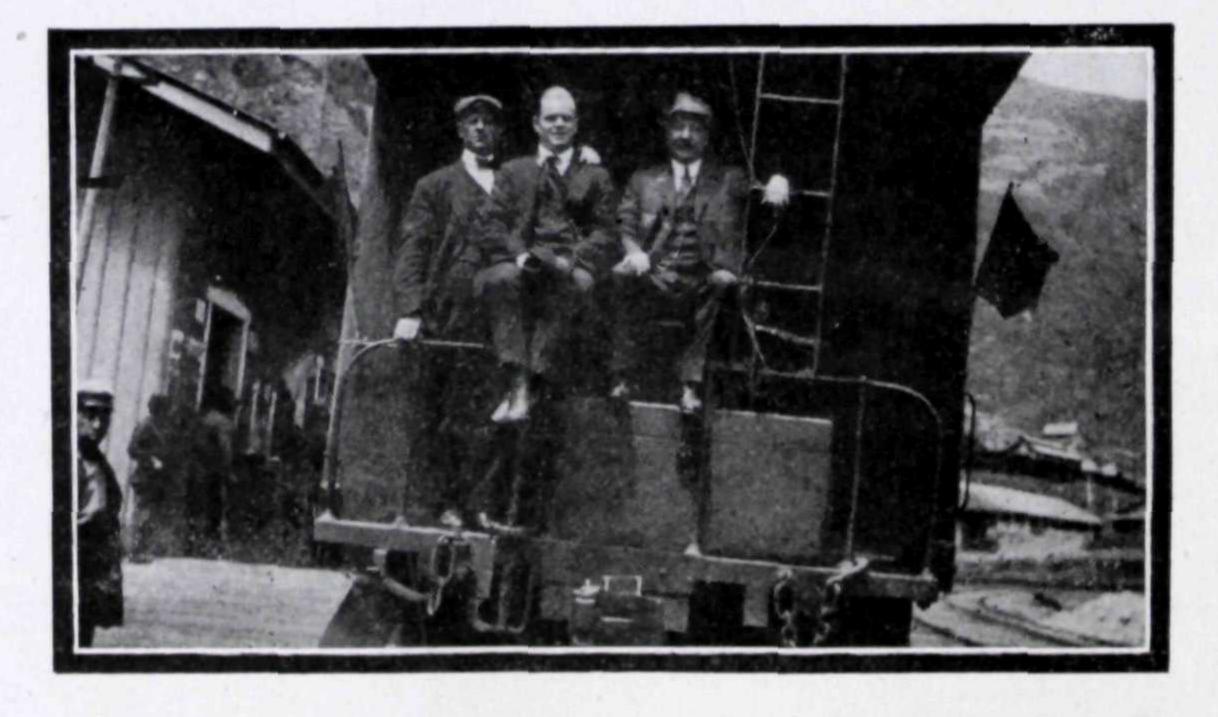
Dr. Edward Ewing Pratt, Chief of the Bureau of Foreign and Domestic Commerce, recently received a tin paper weight in the form of a pig which is a souvenir of one of the notable achievements of the new service. That pig belongs in one of the most dramatic stories of this new "drive" for foreign trade.

Alfred I. Harrington, the first commercial attaché in Lima, was on a ship bound for his post when he was overtaken by a wireless message instructing him to stop at Bolivia and investigate the tin situation. The result was that Bolivian tin, which had been going to Europe for smelting, now comes to the United States, and large smelting plants have been erected here. To accomplish this, certain negotiations had to be carried on with the Bolivian government and certain agreements reached, as, for instance, concerning duty on raw material exported from Bolivia. Dr. Pratt's pig made the journey from Bolivia as tin ore and was smelted in the United States.

Chauncey Depew Snow, the young chief of the Commercial Attaché Division of the Bureau of Foreign and Domestic Commerce, has the interesting task of handling correspondence and reports in which the principal features of world commerce pass in review and in the making.

The commercial attachés are doing more than write a dramatic chapter of the romance of American business. Their achievements are not important to the nation because here and there they add to the profits of an individual manufacturer or exporter, but they are vastly important in that they are helping to build up the whole

foreign trade of the country, and this in its turn is important principally for the reason that, as set forth by THE NATION'S BUSINESS in September, foreign trade is the great stabilizer of our domestic commerce, because a foreign market affords an outlet for the goods of American manufacturers and exporters when the failure of crops or any other cause leads to a poor domestic market. They are our national travelling salesmen.



This picture of William F. Montavon (to the right), commercial attaché at Lima, Peru, on a freight caboose reminds us that one must not look for home comforts when traveling abroad.

Must Opportunity Break in the Door?

History Has Created a Moment in which the American Exporter Will Gain or Lose the Trade of 182,000,000 Awakened Russians

> By HENRY D. BAKER Until recently Commercial Attaché to Russia, now Consul to Trinidad

INCE I've been back home I've noticed that hotels charge in the vicinity of fifty cents for my breakfast eggs. That means about twenty-five cents per egg f. o. b. the kitchen, without counting the overhead included in the waiter's tip.

It is plain extortion. Or rather it is fancy extortion. Somewhere in the world there are plenty of eggs. I happen to know that one of the "somewheres" is Siberia. There may be an outcry against a proposal to allow the pauper hens of Russia and Siberia to compete with the eagle-free poultry of our own fair land. But if the American hen, either through lack of consciousness of her destiny or ordinary shiftlessness, can't take care of her market, she has no right to a single cackle of complaint.

Both Russia and Siberia are well populated with chickens. In Siberia alone about \$45,000,000 worth of eggs are marketed each year, and the production is valued on a scale of prices much lower than that of our country. The figures include sound eggs only, and they make up but forty per cent of the entire out-

put of Siberian nests.

Right there is where the American business man comes in-or ought to come in.

The average person thinks of Siberia as a frigid and desolate waste that produces nothing but icicles and chilblains. He would no more think of trying to sell refrigerating machinery there than he would think of peddling ice cream freezers among the penguins at the South Pole. Yet there is a great

opportunity in Siberia for the sale of American refrig-

erating machinery.

Sixty per cent of Russian and Siberian eggs fall from grace through lack of cold storage facilities. Only in such great towns as Petrograd, Moscow, Bukhara, and Odessa are there any refrigerating plants. Cities of 30,000 and more all over the empire are without any sort of artificial refrigeration. In realizing the need for these plants, you must get the idea firmly fixed in your mind that the climate in large productive areas of Russia and Siberia is as hot as Florida during much of the year.

Now, it would certainly seem to be profitable trade

reciprocity if we were to buy eggs from Russia and sell in return American refrigerating appliances which could more than double the value of the output of the industrious Slav hen by saving the eggs now wasted.



This then is the message from Russia: There are in Russia limitless markets for American products; and these markets are beckoning to American merchants; and with a better understanding of Russia sociologically, geographically, and commercially, on the part of the business men of the United States, together with a right to combine in foreign trade, and better banking facilities, Russia will furnish a great market that ought to prove a wonderful stabilizer of American trade.

AMERICA'S first important commercial dealing with Russia took place in 1868, when Alaska was purchased for \$7,200,000. When we consider what this big real estate transaction with Russia has netted our country, we can get some idea of what may await us when we get interested in the trade and development of the entire Russian Empire. Years after we had purchased Alaska for only \$7,200,-000, the value of the products of that territory amounted to approximately \$550,000,000. We now know that the value of Alaska is in its infancy as regards railway, mining, agricultural, fisheries, and forest development. Not only is Alaska gaining in wealth and population by leaps and bounds, but also trade with that territory accounts in large measure for the fact that our north Pacific Coast is going ahead more rapidly than any other part of the United States, and cities like Seattle and Tacoma have been multiplying in population and in the extent of their trade.

When we bought Alaska, we took possession of about 590,000 square miles of land and the deal covered an area considerably over twice the size of France. But so huge is the Russian Empire that the subtraction of 590,000 square miles of land affected the territory of the Empire

only about as much as it might affect a farmer who sells 10 acres from a farm of 150 acres. The Russian Empire at present covers 8,647,000 square miles of land, or about one-sixth of the entire land surface of the world. It has over twice the area of the United States including Alaska.

What the United States has already accomplished in the way of profitable business from the comparatively small fragment of the Russian Empire which it purchased, should in the future be proportionately accomplished many times over by friendly diplomatic relations with the great Empire itself, and active business attention to trade and investment in that huge Empire. In fact Russia with its 182,000,000 people, rapidly increasing in

numbers and gaining in standards of living, lies before us as the greatest land of promise for American trade that exists in any part of the world.

THE use of all kinds of American 1 agricultural implements and machinery in the Russian Empire is already considerable, and yet the business is insignificant in comparison to what it may be in the future. Most of the grain in Russia is still cut with a scythe, but the money now being saved from the vodka habit will make it possible for the Russian peasant to buy binders made in Chicago. A significant feature about Russia is that its main industries and most promising fields for development are similar to what we have had in the United States. Therefore America

is in a better position to teach Russia from its own experience than any other country. This is well recognized in Russia. It is certainly beginning to look more seriously to America for the methods, appliances and machinery which have successfully stood test.

America's most important imports from Russia have been hides and skins, but the true value of such imports has been obscured by the fact that they have come chiefly through Germany instead of directly. There can be a profitable reciprocity in buying Russia's hides



Henry, D. Baker in the regalia he wore at the Russian court. An attaché must be as versatile as a matinee idol in his dress. Soon after posing for this picture Mr. Baker could have been found on the blistering deserts of Transcaucasia in a sun helmet and khaki.



Treading out the grain.—Russia, preeminently an agricultural country, uses, for the most part, primitive methods on the farm. Intensive agriculture is practically unknown, and the government fails to provide technical instruction. Economic conditions, however, are slowly forcing Russia to adopt modern methods, as evidenced by the increasing importation of farming machinery, mostly American, and the more general use of fertilizers.

directly and shipping back glazed kid and other kinds of leather, also boots and shoes for the vast population whose standards of dressing are constantly improving. We could also ship more equipment for the Russian tanneries. There are already about 50 tanneries in Russia equipped with modern American leather-working machinery. Previous to the war the greater part of Russia's skins had gone to Germany, and most of the leather Russia required was made in Germany out of the Russian skins.

IN consequence of the extreme difficulties at present I of arranging trade between Russia and the outside world, in anything except war material, there has developed a serious scarcity in all kinds of merchandise suitable for the ordinary peaceful needs of the immense civil population. Almost every shop in Russia presents a pitiful showing of low stocks. All imported goods are sold faster than they can be replenished. Shop dealers apologize when they show you their stocks, with the exception of things that can be made locally. This is a condition which will probably grow worse until the end of the war. Although transportation facilities are being constantly improved, so vast are the requirements of the government for war purposes, that it will doubtless be impossible to give added facilities for the import of goods for private firms.

As soon as peace comes it will be like opening the gates of a dam, and a great flood of imports should flow into this immense empire desperately thirsty for such goods. Ships can then carry peaceful articles of commerce, and the railways will be open for internal trade. The embargo regulations which now hold back export from Russia to the United States can be abolished. This would release an immense accumulation that would help pay for imports from the United States, and improve the rate of exchange, which is now such a formidable obstacle to trade.

You have heard a great deal about the buga-boo of foreign dumping into the United States when the war is over. I am sure that the various articles which Russia will be ready to dump upon us will be eagerly welcomed.

THE purchasing power of the Russian people has increased considerably during the war, and the average person in Russia will be able and anxious to be a more liberal buyer of foreign goods. It is usually considered axiomatic that war impoverishes the people of a country. Not long ago a Russian official remarked that Russia, since the war, without vodka, was more prosperous than Russia before the war, with vodka. My own observations in Russia led me to believe that this extraordinary statement is true. Notwithstanding the enormous costs and sacrifices of the war, the condition of the common people has never before been so satisfactory and promising.

The close of the war will find Russia poorer in stocks of merchandize than ever before, and with pockets stuffed with more money than ever before. If each person in Russia should spend one dollar a year more than before the war, this alone would represent an equivalent of over \$180,000,000 a year in increased purchases. A comparatively small circumstance, such as the peasants adopting the luxury of pocket handkerchiefs and collars, has an immense significance for the cotton trade.

I was amazed at the great number of shops doing a noisy and flourishing business in phonographs. The tremendous sale of perfumes and toilet soaps with attractive wrappings was also interesting to notice. All sorts of miscellaneous articles are now wanted by the Russian peasants who, before the war, had nothing to show for the money they made except the red noses and other outward signs of the vodka that absorbed their earnings.

THE United States should make a parcel post arrangement with Russia. For years we have been asleep in this regard while other great commercial countries have been profiting tremendously by parcel post facilities which governments arranged for their merchants. A heavy proportion of Germany's enormous business with Russia was done in this way. One of the reasons why it used to be so convenient for American firms to send their goods to Russia via Germany was because German firms could send such goods by parcel post to all parts of Russia. American firms did not have the same privilege. One of the notable features of the vast inflow of goods to Russia through the Pacific port of Vladivostok is the large use made by the Japanese of the Russian parcel post, which by treaty is open to the Japanese for the forwarding of small parcels.

A large aggregate bulk of goods coming to Vladivostok by sea is at that port broken up into small packages which are then put into the post. No such facilities are open to Americans.



The long winters and short, hot summers of Russia ripen grain rapidly, making it necessary for the Russian to do in a few weeks the work to which the farmer of western Europe gives months. This and the poverty of the peasants probably account in a large measure for the fact that the women are compelled to labor in the field.



COURTESY OF R. MARTENS & CO., INC., NEW YORK

"BEHOLD, A SOWER---"

This Russian peasant farmer has benefited by the government's abolition of communal holding of agricultural land. Formerly a commune might set off to a peasant for cultivation a hundred or more patches of ground from 200 feet to half a mile long and in some cases no more than five feet wide. Now a peasant's holdings are in a single block of land.

In the interest of American trade, it would be desirable for our Congress to pass promptly the pending bill to allow American firms a clear right to combine for purposes of export trade, and to maintain joint selling agencies in foreign countries. It we are to assist "little business" so that it can participate in foreign trade, we should allow it the privilege of uniting and jointly acting, so that it may have sufficient power to achieve important results by unity of action. If is grossly unfair to encourage the small manufacturer to enter a country like Russia, where he must compete against trusts fostered by the German and Russian governments, and then deny him the power to prevent himself being blown out of the market when he makes his first drive. You cannot fight fifteen-inch guns with pop guns, nor can powerful foreign trusts be combatted with small, weak firms unable of their own strength to campaign for trade in that country.

During my Government service in Australia, British India and Russia, I noticed that the bulk of our trade in those countries which amounted to anything was carried on by corporations which were under indictment in the United States for violation of the Sherman Anti-Trust Act. In Australia, the local competitors of our great American industries used to make a powerful argument to the effect that Australians ought not to trade with American companies which even their own government was prosecuting.

F the United States is to take advantage of the great - opportunities in Russia, it will have to use all of its forces in a supreme effort to secure the trade which ought to come to it. When the war is over the scientific German will struggle to regain his old dominant commercial position there, and to overcome the prejudice against his goods which the bitter war has occasioned. England also will do its best to profit by the close relations of friendship established by shedding blood in a common cause. The United States, in order to successfully compete in the Russian market, must enlist the support of every possible agency.

Russia after the war, and must start by learning now all for business careers in Russia. While I was in Russia, it

they can about the condition of the Russian market and of methods of doing business there. The banks of the United States should consider at once the opening up of branches in Russia to assist American trade, just as the German banks assist German trade and British banks assist British trade.

It was primarily through the instrumentality of

German banks that German business firms held almost a monopoly of the Russian foreign trade before the war. German merchants would accept notes instead of cash for goods sold in Russia and these notes they would then take to German banks which would discount them. Thus the German merchant would need to have no further concern about such transactions, but would look for other business. American firms, however, wishing to sell goods to Russia and having no American banks familiar with Russian credits to assist them, or take the notes of their Russian customers, would require cash in New York before shipping the goods.

The Russian merchants infinitely preferred the German method of accepting their notes, consequently, in order for business to be arranged between American and Russian merchants, it became the custom to invite the assistance of German firms and German banks to act as intermediaries. America would sell to Germany and Germany would sell to Russia.

THE banks and the stock exchanges of the United ▲ States have an important service to render in assisting American capital to become largely interested in Russia. Gilt-edged Russian railway and industrial securities ought to become listed in our exchanges and made familiar to the American investing public. Nowadays international trade does not follow the flag nearly so much as it follows the bond. When one country lends money to another country, it usually gets business in that country to the equivalent of the amount it lends.

American universities and colleges should start to teach the Russian language, and every encouragement should be given to young men to learn Russian for commercial service in that country. Thanks to the generosity of Mr. Hill, the Russian language is soon to be taught at the State University in Seattle, Washington. In England, public sentiment is fully alive to the desirability of opening courses in the Russian language, and the London County Council has been appropriating money liberally for this purpose, the result being a big increase in American manufacturers must prepare for trade with the number of young Englishmen qualifying themselves

> seemed pitiful to me to see the way representatives of important American firms floundered around the country trying to discuss important and delicate business matters through cheap hotel interpreters who often revealed business secrets to rival firms, and who were utterly incompetent to interpret negotiations concerning technical articles of trade.



COURTESY OF R. MARTENS & CO., INC., NEW YORK

Notwithstanding the suggestion of the primitive in this "human towing horse" pulling a boat on the Volga, waterway improvement is a vital question in Russia, which proposes, among other things, to connect the Don and the Volga rivers by a \$25,000,000 canal in order to facilitate the shipment of coal into central Russia.

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WASHINGTON, DECEMBER, 1916

THE RAILROADS are pretty well accustomed to a quiet room at the top of an old office building in Washington where the Interstate Commerce Commission hears arguments about the reasonableness of rates and the like. They are now becoming acquainted with another room decorated with white marble, mirrors, and crystal chandeliers, in the office building of the Senate, where a Congressional commission is listening to a discussion of the position of the railways in American life, their present condition, and the course of future public policy.

So far amiability and informality have characterized the proceedings. A goldheaded cane has even come near to having a speaking part. There is no lack of perception and seriousness, however, on the part of members of the committee. When the first witness had presented the programme which the railroads suggest they spent a week in asking him questions of so keen a sort as to make it pretty sure that any conclusions of the committee will undergo the acid test.



COOPERATION IN EXPORT TRADE, among non-competitors, is described by the chairman of the Federal Trade Commission in a book he has just published. An American corporation organized for this purpose has been making its way unobtrusively for twenty years, now having a million dollars in capital and a hundred stockholders; it deals in paper, ink, printing presses, and the like. By individual contracts the corporations get an exclusive right to sell the manufacturers' products in certain countries for a term of years, the corporation buying the goods outright upon agreed terms and selling them to its customers, arranging on its own account for shipments, credits, and other details of sale. The policy of the corporation is to develop a sound and profitable business rather than to achieve quick results.

Cooperation among non-competitors, however valuable, will not present a united front to our foreign competitors. The kind of cooperation which the Trade Commission has asked Congress to sanction involves competitors.



CONDITIONS IN FOREIGN TRADE, present and future, which led the Federal Trade Commission last May to ask Congress to enact legislation affirmatively permitting American competitive firms to cooperate in their export trade, were made public in detail on December 2. Advantages of foreign manufacturers in freight rates to the ports of export, in means of ocean transportation, in banking facilities for their overseas business, and in cooperation among themselves for their common advantage are set out in a reiteration which is especially forceful at a moment when a journal like the London Statist publishes rumors of such large and powerful industrial combinations in European countries after the war that it feels alarmed for the middlemen and suggests an enormous Guild of British Merchants.



THE STOCK MARKET has recovered its pristine glory. The number of shares bought and sold on the New York Stock Exchange in 1916 will exceed the number in any earlier year except 1906, the banner year, and its two nearest competitors, 1907 and 1901. The par value of bonds bought and sold will go above the total for all other years except 1909.

Broad outlines of the course of things show that throughout November railway shares consistently kept tending upward, whereas shares in industrial concerns on the whole remained pretty much on the level. In the bond market these days issues by governmental authorities have a much larger place than before the European war. In the last week of November they constituted twenty per cent of the par value represented in transactions; in the corresponding week of 1913 they made up scarcely three per cent.



Foreign Loans, when one is the lender, contribute to self esteem. Whether or not the United States is to keep indefinitely its position as a money market for the world,—and some of our earnest financial writers are coming to rate it as a good probability; even some London financiers now acknowledge it as a possibility,—the investing part of the American public has had the excitement of choosing among six new foreign loans in one week,—the third week of November. An investor could lend to Russia, Bordeaux, Lyons, or Marseilles and get 63/4 per cent for his money. He could lend to Sao Paulo, Brazil, and have a little less

return,—between 6 and 6½ per cent. If he preferred China he had his reward, receiving 6.90 per cent. In contemplating these returns the American investor naturally has to keep a weather eye on the federal income tax.

THE NATION'S BUSINESS As Reflected in the Month's News

The Railroad Hearings Begin Where Cooperation Is Easy Why We Need to Help Each Other The Stock Market Smiles Want a Foreign Bond? Packers Do Land Office Business

In all of these loans national or provincial governments were borrowers. Our money is not being sought so eagerly or so publicly for foreign industrial enterprises. For example, new French chemical enterprises are finding their capital in France itself. Nor are European countries selling to us any great amount of the securities they hold in enterprises of countries like Argentina. Clearly, and very properly from their point of view, they are doing their present-day financing with an eye out toward the situation after the war.



THE CHICAGO PACKERS are in a big way of business. Indeed, it is said for them that in the square mile they have made peculiarly their own in Chicago more business is done than in any area of similar size known to man. As a matter of fact, the packing companies of Chicago now have sales aggregating something like a billion and a half dollars a year.

Of course, the Chicago packers long ago began to develop ancillary packing centers. Kansas City, Omaha, and Fort Worth are in a way satellites of Chicago, and local packing centers occur in all parts of the country.

Belonging to the meat-eating half of the world, we utilize the packers' facilities on a great scale. In the ten months ended with October this year seven and a half million cattle, eighteen million hogs, and nine and a half million sheep entered the packing centers. If these sheep had walked single file, nose to tail, they would have strung out for five thousand miles. The cattle and hogs could have marched in even more fantastic parades on their way to the shambles.

Quite naturally the transaction of such business as the large packing companies handle gives rise to some profit. One company has recently declared a stock dividend of 400 per cent, and another has paid a cash dividend of 33 1-3 per cent and at the same time offered to stockholders an equal amount of new stock at par. At the farm prices reported by the

THE NATION'S BUSINESS As Reflected in the Month's News

American Dyes Abroad!

Efficiency Plus on Lake Fleet

Hail the Humble Potato!

Born: A New National Policy

Still Some Romance at Sea

Ship Buyers! Stop, Look, Listen!

Department of Agriculture for November 15,—\$6.44 per hundred pounds for beef cattle, \$8.74 for hogs, and \$6.41 for sheep,—the farmers are sharing the prosperity of the packers; they currently receive over the average prices of six years for this time of year, 21 per cent in the case of cattle, 28 per cent in the case of hogs, and 45 per cent in the case of sheep.

BOY

AMERICAN DYES are making their way, abroad as well as at home. They are now going to foreign countries to a value of seven million dollars a year; before the war they did not amount to more than \$400,000 a year. Of course, prices have risen tremendously. In the imports of synthetic indigo we can get at some averages. In 1904 the average value declared by importers was 14 cents a pound; this year it has been \$1.70.



IRON ORE has been brought down the lakes this summer to an amount exceeding the estimated capacity of the vessels. The fleet handling ore contains 395 vessels. These vessels have a rated capacity averaging 7,500 tons, and they normally make 20 trips in a season. Thus, the fleet has a capacity for transporting 59,000,000 tons a year.

But the fleet is doing better. It is going to record 62,000,000 tons before ice ends the season. It is doing better than its capacity because of refinements at very conceivable point,—in loading and unloading, in speed, and even in adjusting cargo so nicely that when a vessel reaches Lake St. Claire the coal it has consumed will decrease the draft just enough to get the keel over the shallowest point on the route. Jockeying six hundred foot ore boats has this year reached an exact science.

Potatoes may account for the fighting propensities of Ireland. If so, Ireland may be abnormally tractable this winter; the potato crop has turned out so badly that a good part of the land is demanding an instant embargo upon exports from its shores.

England, too, has so few potatoes that they have occupied much space in parliamentary debates. When the price mounted to \$2.50 a hundredweight, wholesale, and \$4 retail, a cabinet minister urged the populace to deny themselves potatoes at least twice a day and substitute less expensive luxuries. In the streets of Manchester sumptuous automobiles have been detected hauling sacks of potatoes. And, somehow, the potato panic of the United Kingdom has infected the United States, for with a crop of 289,000,000 bushels,—but three per cent below the average of ten years,—our farmers are getting twice the price they received last year. Very naturally, those parts of the country that are especially salubrious for the potato,—favored portions of Maine and New York, certain counties of Michigan, Wisconsin, and Minnesota, areas from New Jersey and Florida, districts in Louisiana, Nebraska, Colorado, Idaho, Washington, and California, and so on,-rejoice exceedingly over their financial returns.



THE FEDERAL RESERVE BOARD was created that we might have definite American policies, both in domestic financial affairs and in international financial relations. That the Reserve Board does not shirk it hauty as a controlling body it demonsts and on November 27. With two foreratt governments about to offer, especially to banks, their promissory notes to an indefinite amount, after there had been some discussion of the disadvantage of further imports of gold, the Board in one statement made three announcements: that further importations of gold in large amounts can be received without necessarily being a source of inflation; that national banks should provide against future contingencies by keeping their assets liquid and by refraining from locking up their funds either in long-time investments or in investments which in form have short maturities but which in the nature of things are likely to be replaced at their due-date with other obligations; and that, since private investors may have to seek the aid of their banks, they should be careful before making foreign investments to receive full and authoritative data, in order that they may judge the future in the light of present conditions and economic developments of the past. The Board adds that foreign countries might offer here the hundreds of millions of our own securities and other countries' securities which they still hold.

Whether or not one agrees with the Reserve Board's premises and conclusions, he cannot very well fail to recognize that the Board has struck out a national policy. Other countries have national policies of finance and are pursuing them in their relations with us in money matters. Formerly we had no such policy. It is an important achievement to attain a policy for ourselves,—good, bad, or indifferent.



DANGERS OF THE SEA are still very real, although people who sail the ocean in liners may have anxieties only over their comforts. The Coast Guard each year tells of the realities,-surfboats launched from ice banks through heavy surf in the face of a forty-mile gale and a snow storm, an ice-encased vessel rolling so violently that to reach a lifeboat the crew one by one had to crawl to the end of the spankerboom and drop off, a disabled steamer working from Hatteras to New York with a Coast Guard cutter astern at the end of a line to serve for rudder, a rescue steamer drifting in a gale for three days with a dismasted ship before it could pass a line, stranded vessels pulled from shoals in zero weather when nine-inch hawsers become rigid with ice, fishermen adrift in Alaskan waters for ten days in a dory, and the straightened circumstances of natives on Arctic shores because of slaughtered walrus herds. All the hardships of the sea are told to the headquarters of the Coast Guard, in reports so curt they are gruff.



SHIPBUILDING CONTRACTS are things to be looked after sharply these days, if one deals with any but established yards. A representative of Norwegians who have been contracting for ships warns all buyers to look to the contracts they make. "Neutral countries have been scoured for yards," he says, "no matter what may be their condition and facilities. Sagacious promoters who have much to gain and little to lose organize companies to take over these yards, and sell the yards they collect to these new companies for fanciful prices in stock. With the aid of shipbrokers, who have good commissions to make, they then get for a company a number of contracts for constructing vessels, and having in this wavadded value to the stock they sell out their holdings, leaving in charge of the yards, and the contracts, a set of new stockholders who know nothing of shipbuilding." When such a contingency arises a man holding a contract needs to look to the letter of the bond and proceed energetically if he wants his boat on time. Whether or not this general description of affairs in neutral countries fits the United States the Norwegian does not say.

British Ships are getting into some large combinations. Indeed, "organized consolidation" is declared in some quarters to be essential to a continuance of England's supremacy on the seven seas. In the latter part of October an English owner already controlling steamers which among them would carry well over a million tons of freight paid down fifteen or twenty million dollars to get control of seventy-two more. He now has almost one-eighth of the British cargo-liner tonnage in vessels that exceed 1,000 tons. Transatlantic lines have been making some new arrangements among themselves in connection with the three Canadian railroads; a group of three lines is to work with the Canadian Pacific, and two others apparently link up with the Canadian Northern. Others may have some plans under way which will put them with the Grand Trunk.

The way things go for a British shipowner just now is described by an authority. Out of a steamer worth \$150,000 in ordinary times an owner who does not have his boat requisitioned by the government may at current rates expect to make around \$500,000 a year. After deducting depreciation and interest he will have about \$400,000 over the rate of earnings before the war. Accordingly, of these "excess profits" he has to pay to the British government about \$280,000.



AMERICAN VESSELS have a bigger place in our foreign trade than for many a year, as everybody knows. To the end of September this year their tonnage has represented a third of the tonnage of all vessels entered and cleared in our foreign trade. This is about five per cent better than last year and ten per cent better than in 1914, when American tonnage constituted twenty-one per cent of the whole. The proportion of American tonnage in various trades varies decidedly. This year the figures indicate it is 6 per cent with Europe, 54 with Canada, Mexico, and Central America, 42 with South America, 9 with Asia, 36 with Australia and New Zealand, and 7 with Africa.

Everybody knows, too, that foreign vessels get most of the valuable package goods, and Americans carry the cheaper bulk goods. Although a third of the tonnage in vessels is ours this year it carries but 13 per cent of the value of our exports and 24 per cent of the value of imports. This is a distinct improvement, however. In the twelve months before the European war the corresponding figures were 7 and 11.

Even so, we are not keeping up proportionately with some of our brethren. In three years we increased by 250 per cent the value of our own imports carried in American bottoms, but Japanese vessels increased their share in

these same imports by 430 per cent. In the same period, the value of our exports carried by American vessels grew by 350 per cent, the value carried by Norwegians 484 per cent, and the Japanese' part 970 per cent. Perhaps the 76 steel steamers

THE NATION'S BUSINESS As Reflected in the Month's News

British Shippers Hanging Together

Yankee Vessels In Foreign Trade

Norwegians Are In Clover

Pianos! On To Mexico!

Crops, Cattle, and Legislatures

put into commission from American yards in the first ten months of 1916, and the 417 steel merchant vessels reported under construction or contract on November 1, will help out. One difficulty is that the web-footed Norwegians are sure to filch some of them from us; indeed, of the 17 new contracts reported in October, Norwegians appear to have made sure of seven, and before the boats can be built they may acquire a couple more of the lot. The price they offer appears irresistible.



Norway has such an inflow of wealth these days that the people are described as enraptured. The country is lending money to both England and France. Since the days he he Vikings Norway has probably not he fa period so much to its liking. Pretty nearly every Norwegian has a strong inclination to go down to the sea in ships. Those who have resisted this native bent in the last year or two have indulged generously in shipping shares. Anyone can buy shipping shares on the streets and in the clubs.

Norwegian steamers have been earning large profits. By way of example, tramps hailing from Bergen made \$4,000,000 net in 1913, and \$12,000,000 in 1915. To be sure, there have been losses. At the end of October 147 Norwegian steamers aggregating 218,000 tons had been sunk, 44 of them after the middle of September this year, when German submarines went even into the Arctic after Norwegian boats. The Norwegian club for warrisk insurance has had losses of approximately \$30,000,000, while our own governmental scheme has had less than a million.

Losses seem to have whetted the Norwegian's eagerness for adventure by sea.

When submarines became troublesome, they kept their vessels in port a day or two,—especially those which were carrying a large part of the coal trade between

England and France,—and after making some adjustments of insurance sent them out again. In a recent week almost as many Norwegian vessels as British entered the port of Rotterdam. New construction on Norwegian account has more than replaced losses, too. Building is going forward in all the yards of Norway, in Holland, on the Great Lakes and both eastern and western seaboards of the United States, and even in China. As men of the sea, Norwegians have come into their own.



PIANOS and revolutions somehow seem unharmonious. A fife-and-drum corps might accord with one's notions of musical proprieties for revolutions, or even a brass band, but pianos and lyric sopranos do not exactly suit one's ideas about the fitness of things.

There is no gainsaying, though, that a dealer from Mexico City has been in New York buying as good pianos as we make. He reported excellent business at home, and went on to tell of recitals and concerts before enthusiastic audiences of the fashionable and smart sets. There has even been a season of Italian-Mexican opera!



Crops for the year can now be estimated with a degree of accuracy. The Department of Agriculture has a way of lumping all crops together and striking a general average. Using this procedure the Department says that in product the crops this year fall below the average by three per cent whereas the prices exceed the average by forty per cent.



OUR LIVE STOCK SHOW in Chicago has two Argentine judges this year, by way of reciprocity for the judges we sent to Argentina in August. One of the Buenos Aires papers has hastened to send a special correspondent to Chicago to report upon our achievements in fine cattle.



The Mining Industries are having a heyday and at the middle of November sent such large delegations of representatives to a mining congress in Chicago that the rooms selected for meetings would not hold them all. Every man who delves in the earth after minerals, precious or base, could find a section of the gathering which was discussing things of particular interest to him.



The Legislatures will be busy this winter in forty-two states. It happens that the big year for state legislatures is always the year for the short session of Congress.

SEA YARNS abound. Some are true and some are not. One of the latest runs to the effect that a steel sailing vessel which was wrecked several years ago up a river in Liberia lay in the mud because no one would buy her. Since ocean freight rates have gone up, however, a Baltimore man purchased the hull for \$5,000, raised it, brought it across the Atlantic, and when he had her refitted as a first-class sailer, sold her for \$300,000.



The Billboard has for a generation been a bone of contention between some business men and a part of the public. The former have stood to their rights to decorate private property with the hues

of the rainbow as they might see fit, and the courts have said that although there is a very distinct limit to violence with which a man might use his land to shock other senses of his neighbors and the public, there is no end to the assaults he might make on the sense of form and color.

The Supreme Court of the Philippines has come to the rescue of aesthetic comfort. It has suggested that some of the people who want billboards on their lands should try turning them inwards that they themselves may feel the sensations they cause. In the present order of things, this decision will have no effect outside the Philippines, unless it should go upon appeal to the Supreme Court of the United States.

The Legislative Outlook

Congress, With Much To Do And Little Time To Do It, Will Consider Important Measures Affecting Commerce And Industry

If the Houses of Congress have sessions every day between December 4 and March 4 except Christmas and Sun days they will have but seventy-six days in which to decide upon a billion and a half dollars of appropriations and deal with an accumulation of general legislation which will be vigorously urged while one party has good working majorities in both Houses. Bills which do not get enacted before March 4 will find difficulties in the following two years; for party divisions will be so close in the House that management of legislation will be no easy task.

The active work of the new session began immediately after November 7. In the week of November Preliminaries 20 committees were not only preparing such appropriations bills as the measure carrying money supplies for the Navy and embodying the naval policy of the country, but confrerees were trying to reach some basis upon which the House and Senate can agree as a national policy regarding the water powers over which the federal government has any degree of control. The conferees, however, seem to be as far apart as ever. The members of the House Committee on Mines and Mining were summoned, too, that they might prepare for an attempt to get a revision and codification of the federal mining laws. In outward semblance the Capitol and its environs had the deserted appearance usual between sessions; out of sight, however, there was a deal of stirring around.

The Webb bill, with its express assurance that cooperation is lawful for export trade, will surely

EXPORT come to the front. Having passed the House by a vote that was well-nigh unanimous, it is on the docket of the

Senate Committee on Interstate Commerce. As yet it has had no consideration by this committee, but is reasonably certain to be discussed at the committee's first meeting, on December 8. The chairman may then appoint a subcommittee on the bill.

Possession of the Webb bill on the part of this committee may early be disputed on the floor of the Senate by the Committee on the Judiciary, which normally gets bills affecting the Sherman law and apparently expects sooner or later to have this measure before it.

Whichever committee takes charge of the bill will probably have to consider some amendments. As changed in the hurry of debate in the House the bill at present declares associations entered into for export trade are not unlawful on condition that they do not restrain export trade. According to some interpretations such language would leave exporters pretty much where they are now, since they would fear that any association would be construed as restraining export trade among its members.

Prophecy about the course of Congress in controlling the relations between rail-

ways and their employees
RAILROAD is a little hazardous.
LEGISLATION Some facts and probabilities are that in the middle of November the railroads, acting upon the advice of a committee of legal counsel, filed petitions in the federal courts for injunctions against enforcement of the Adamson law on January I, when by its terms it becomes operative.

All these petitions,—and they are now probably pending before every federal district court in the country,—assert unconstitutionality. The roads' objections are that the new law takes the property of the railways wrongfully by interfering

with liberty of contract and in providing no way for reimbursement for the increased expenditures it causes, that it does not regulate interstate commerce and does not promote public welfare, that it unfairly exempts some roads and arbitrarily discriminates in favor of some classes of employees, and that it imposes excessive fines and cruel punishments under requirements which the roads cannot intelligently apply to their circumstances. Some of these petitions are accompanied by several hundred pages of exhibits, which presage lengthy arguments in court.

In order to hasten the possibility of a decision by the Supreme Court, a federal

APPEAL TO heard arguments and on November 22 announced his conclusion, that the law exceeds the powers of

Congress. Thereupon, both the Department of Justice and the railroads undertook to make this a test case, and prepared to ask the Supreme Court when it convened on December 4, after its Thanksgiving recess, to hear arguments at once.

That the Supreme Court will give preference to the case there is little doubt, but there is not the same certainty that it will undertake to decide all the points the government and the roads wish to argue or that it will announce its conclusion before January 1. February 1 may turn out to be the earliest possible date.

Enactment of further legislation on the subject may await the Supreme Court's

LEGISLATION amend the Adamson law
MEANWHILE may make their appear-

ance at once. Besides, the law enacted in September was only one of four items in the programme proposed by the President. Two of the items were incorporated in bills drafted by the Department of Justice and as yet not acted upon. One made it unlawful for train-service employees to strike, or for railways to inaugurate a lockout, until an investigation by public authority has been completed and made public. The other, in the event of serious hindrance to railway transportation because of a strike, authorized the President to draft the services of railway employees and operate the roads so far as essential for military purposes. The third proposal contemplated enlargement of the Interstate Commerce Commission and direction that in fixing rates for transportation it should consider expenses on account of wages. This question, at least, may now await some recommendation from the Congressional joint committee which is conducting hearings about the whole philosophy of the railroads and their regulation.

Altogether the railroads will have much public attention in Washington this winter. They may vie with the high cost of living.

Analyzing the Railroad Question

Two Hundred Thirty Business Men, Representing That Many Thousand, Consider Ways and Means of Keeping Industry's Wheels Turning.

HE railroad problem, particularly with reference to the paralysis of the transportation systems of the country through strikes and lockouts, was vigorously dealt with from every point of view at a remarkable meeting of the National Council of the Chamber of Commerce of the United States in Washington, November 17th and 18th. Two hundred and more business men from all parts of the country, representing more than 409 commercial organizations which are members of the National Chamber, came together to take counsel, primarily, as to the best way to obtain through legislation, security against the stoppage of transportation as the result of controversy between interstate commerce companies and employes.

The Council was addressed by men who have made practically a life-time study of railroad problems. It was a focussing of the business opinion of the country on this vital question in behalf of the public interest. And the outstanding fact of the discussion was that the public interest was put before every other interest involved in the late controversy which threatened to terminate in a general strike.

Thought-provoking views were expressed by Dr. Charles R. Van Hise, president of the University of Wisconsin, who was chairman of the board of arbitration in the Eastern controversy in 1912; Hon. William C. Adamson, father of the eight-hour law, chairman of the House Committee on Interstate and Foreign Commerce, and vice-chairman of the joint Congressional committee inquiring into the railroad situation, and Alfred P. Thom, general counsel of the Railway Executives' Advisory Committee. Their contributions are presented in another part of this number of The Nation's BUSINESS.

HARRY A. WHEELER, of Chicago, chairman, Committee on Railroad Situation of the National Chamber, pointed out the necessity for the restoration of railroad credit.

"It seems to me that railroad credit cannot be reinstated until three things happen; there must be the assurance of adequacy of revenue, there must be along with that, in order that the public may again come into the purchase of securities of the railroads, and particularly of the capital stock, some federal supervision of the issue of securities, and there must be absolute assurance that, in so far as wrangles between employer and employe are concerned in the public service, the public service shall not be tied up and, possibly, property destroyed, owing to

the inadequacy of laws to control or inadequacy of means to see to it that an agreement is reached.

"In the year 1915, there were but \$12,900,000 stock issues for the construction of railroads, ten million of which was preferred stock of one present company, and in the year 1916 not a single new issue of railroad shares has been offered on the New York Stock Exchange. On the other hand, we have invested in this country, according to Mr. Miller, of the Federal Reserve Board, a billion and a quarter dollars in foreign securities, and other statisticians have told us that our investment in foreign securities in the twenty-seven months since August, 1914, aggregates more than two billion dollars. In our own country alone, we have used capital for other than railroad purposes, the development of industry, commerce, mining and so on, nine hundred million dollars."

THE discussion revolved pretty largely around the question of how to prevent strikes and lock-outs. One of the most interesting proposals was that this end could be accomplished by establishing contractual relations between the interstate carriers and their employes.

Henry R. Towne, president of the Yale & Towne Manufacturing Company, formerly president of the New York Merchants' Association, advocated legislation requiring a contractual relation between public utility corporations and employes based on the principle that in disputes between these public service corporations and individuals the interests of the public are paramount. Under the plan devised by him, the tenure of service of employes of public service corporations, particularly of transportation companies, would be regulated by law in such manner that each person electing to enter voluntarily such employment would be legally obligated by contract to continue therein for a specified term, during which term he could not lawfully quit that employment and the corporation could not lawfully discharge him from its service, except as provided by the contract; and the contract would provide penalties for violation of its terms by either party.

"I am a thorough believer in arbitration," said Mr. Towne. "I believe it should be a component and essential part of any final and complete settlement of the problem, but no plan of arbitration yet proposed goes far enough to meet the final requirement. That final requirement as to public utilities, the railroads above all, is that under no possible combination of circumstances shall there be interruption of the service. That is the vital thing. That is what the public, perhaps not consciously but intuitively, realizes is needed, a provision whereby under no possible contingency shall the continuity of public service by public utilities be interrupted. Even under the Canadian act, if respected and obeyed, arbitration prevents interruption of service while arbitration proceeds, but it leaves the door wide open afterwards for interruption of service if the arbitration fails in its purpose."

Computes on in a discussion of the Canadian Industrial Disputes Act by Dr. Victor S. Clark, of the Carnegie Institution. Dr. Clark, formerly United States government investigator of railroad labor conditions in Canada, Australia and New Zealand, said that while there is no panacea for strikes, the Canadian law is, perhaps, the most successful effort that has been made to mitigate their evils.

The law provides for a board consisting of a representative of the workers, a representative of the employers, and of a third man who is chairman. The function of the board is to bring the opposing parties to a voluntary agreement, or, if that is impossible, to report all of the facts so that the public may be informed as to the cause of the threatened strike.

EORGE E. BARTOL, president of T the Philadelphia Bourse, presented a plan proposed by the Bourse for the reasonable regulation of railroads, which has become widely known throughout the country as the "Philadelphia Plan". It calls for legislation providing for the federal incorporation of companies engaged in interstate transportation of goods or persons, corporations accepting federal charters to be subject to regulation by the federal government alone. It also calls for the enlarging of the Interstate Commerce Commission so as to provide not less than five nor more than seven commissioners for each territorial freight traffic district, and that the enlarged commission be re-formed into territorial or regional commissions, each composed of five or seven commissioners; the regional commissions to have full power within their districts to regulate the carriers operating under federal charters, with recourse to the appellate body only on questions of principle, questions of nationwide application or conflicting rulings of regional commissions.

The plan contemplates the conferring of definite powers on the Interstate Commerce Commission and the placing of definite limits to its authority. Among the essential powers to be conferred would be the adjustment of rates up or down; the settlement of disputes between carriers and their employes as to wages, hours of service or conditions of employment; the correction of inequalities, discrimina-

tions or abuses between the carriers and their patrons; the protection of investors against unwise competition resulting in economic waste; the supervision of issues of securities and such other features as close study of the subject would show to be necessary to protect the rights of all parties in interest, but there should not be vested in the commission the triple powers of investigator, prosecutor and judge.

T CAN hardly say how pleased I am to L have the speakers dwell upon the value and force of public opinion; to my mind, that is the essential thing to secure in our country," said the Honorable Charles Nagel, of St. Louis, member of the board of arbitration in the Western controversy in 1915 and formerly Secretary of Commerce and Labor. "We may argue among ourselves as much as we please, we may have the correct views, but we will never get them upon the statute books or keep them off the statute books until we make public men believe that we are sustained by public opinion. A gentleman said here to-day that we could not accomplish anything because of the politician. Now, let us be frank with

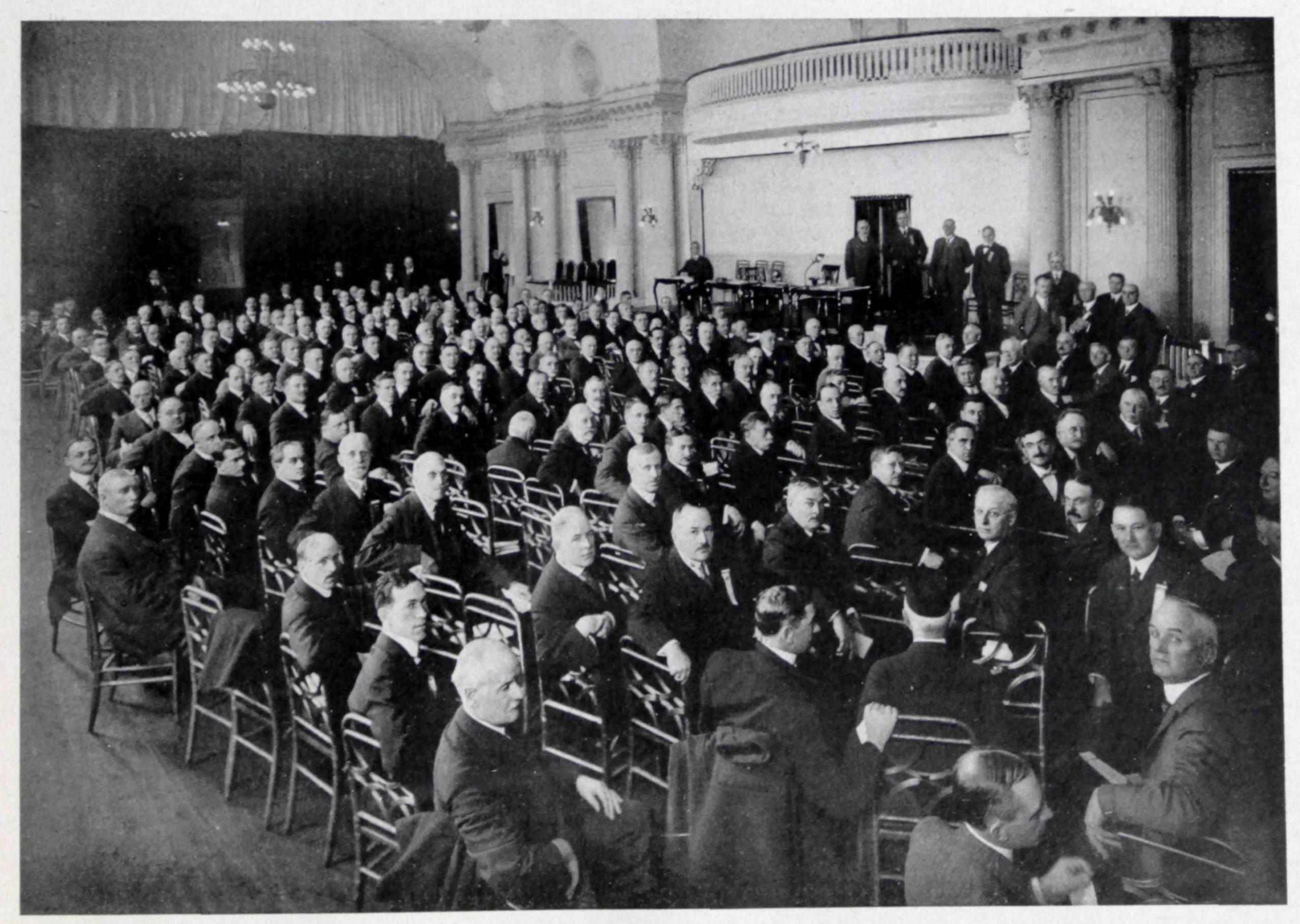
each other. If the politician does not stand, it is because he does not know that you stand behind him. He has some other things to do besides caring for the particular measure in which you may be interested, and he is not going to stake his entire fortune and fate upon one measure unless he knows that those who are pressing for that measure are willing to go up or down with him.

"This thing of creating public opinion four weeks before the election is past. Public opinion, to be of any force and value, must be created while people do not suspect your purpose. That is the time to invite confidence. I speak from experience. I have been put in a place where I had a chance to gauge the force of public opinion, and that was when I sat in the Western arbitration in Chicago. We heard testimony for five months. We had to pass upon sixteen demands; and when the arbitration award was finally handed down, I was made the particular object of attack. I knew enough about public life to know that I would not have you gentlemen behind me, and that I would have the brotherhoods against me, and if I had been a politician, I might have yielded. Not being one, I did not. I

said then that these questions will never be understood, and will never be correctly weighed until public sentiment becomes interested, and public judgment is heard."

THE power in the hands of the busi-I ness man to give shape and force to public opinion was pointed out by President R. Goodwyn Rhett, who related his experience before the Committee of the House of Representatives on the Merchant Marine when he was requested to appear for the purpose of telling the committee the result of the referendum of the National Chamber. At the end of the hearing, the committee members said to Mr. Rhett: "If you can truly bring us what you say you bring us, the informed opinion of the business men of this country, you are going to perform an inestimable service to us and to the country at large.

"Most of the members of Congress want to do what is right," said Mr. Rhett. "They want to know what public opinion is. When we can go to them and say: 'This is not interested public opinion; we are not asking you to do this for our sakes; we are not asking you to do it simply for business men not backed up by



"You have been asked to meet here to study the railroad question. When you can get the combined opinion of the business men of the country, you can be very sure that you are getting an opinion which covers not only those who are interested in the question, but covers the public welfare, which ought to be at the bottom of everything."—President Rhett, opening the meeting of the National Councillors in Washington, November 17 and 18.

public sentiment. We have given you the votes of the chambers of commerce which consist of the most public-spirited men in the urban communities of this country, who have not any interest whatever directly in the question, but who are voting upon it as their judgment of what is for the public welfare of the country at large,'-that must carry enormous force if it is a fact, and you gentlemen can make it a fact. That is what you are here for. If you can carry that message home to your organizations; if you can get the men in your organizations to read those referenda and then give their judgment, based on that, you will constitute the greatest force in this country."

JOHN H. FAHEY, formerly president of the Chamber of Commerce of the United States, addressed the Councillors on the value of organization.

"Within the last ten or a dozen years we have begun to find ourselves in this country so far as business organization is concerned, and we are now constructing something really worth while. I speak particularly of your national trade organizations and your local chambers of commerce and boards of trade; and yet it is all a matter of comparatively recent growth. Even in my own most enlightened city of Boston it is only within seven years that we got over the foolishness of having a chamber of commerce and a board of trade and an associated board of trade, and, when we came to hold an investigation and find out where we stood, nineteen other separate and distinct trade organizations that we were supporting in one city, dissipating our energies and our resources in every direction, and, whenever a public question arose, getting on nineteen different sides of it if we could find that many.

"What is true of Boston has been true of all of your cities up and down the land. But happily we have begun to reform, and we have accomplished something in the process; and the Chamber of Commerce of the United States, if in the three years and a half of its existence had accomplished nothing more than bring together the 800 organizations in every state in the Union which now compose its membership, would have justified itself to the last degree; but it has done more than that.

"Where the influence of the Chamber has been brought to bear and success has been attained, it has been the result of organizing carefully selected committees, placing at the disposal of those committees competent secretarial assistance to do the detail work, of finally presenting to you in the form of referenda complete reports giving both sides of every question where there were two sides, and giving you an opportunity of voting on the project presented; and, finally, when the ballots came in, of making up a chart of the results and

presenting them to every member of Congress, to the Executive, and to the members of his cabinet."

IT was announced that although the railroad brotherhoods had been intvited to participate in the conference, they had not sent a representative.

The National Council, through a resolution, recommended that a referendum be submitted by the National Chamber with a view to ascertaining the opinion of the business interests of the country respecting legislation designed, in the first place, "to prevent interruption of transportation service, pending the settlement of disputes between employers and employes of transportation lines, and to avoid any recurrence of the situation created by the recently threatened railway strike," and secondly, "to make certain that the transportation facilities of the country may be stabilized, improved and extended to meet and keep pace with the needs of commerce and the entire public."

W. H. Stackhouse, of the Commercial Club of Springfield, Ohio, offered a resolution from his organization providing for hearings before a government commission of all disputes between railroad employers and employes, with right of appeal to a higher body; and providing, furthermore, that if a strike or lock-out be executed before the publication of the findings, or contrary to the findings, the government in either case shall protect the party conforming to the provisions.

Mr. Nichols, of the Electrical Manufacturers Club of New York, offered a resolution from that organization indorsing the investigation proposed and suggesting as a remedy the creation of regional sub-committees of the Interstate Commerce Commission to conduct hearings, and the assurance by Congress that the railroads would be permitted to charge rates that would permit the proper development of present unused lands.

C. A. Magnuson offered a resolution from the Minneapolis Chamber of Commerce dealing with bills of lading, on which the Interstate Commerce Commission is holding hearings under the Cummins act. The Minneapolis Chamber urged that nothing be printed on a bill of lading to minimize the liability of the carriers under the law.

From the Editor's Mail

To the Editor:—The Chamber of Commerce in a neighboring state considers that its chief activity is to secure factories. The Secretary and an Industrial Committee are devoting their energies to getting factories to move into their town from other locations. A number of devices are employed to encourage the factory to make the change. In some few cases bonuses are offered. Sites have been given in some instances.

In quite a number of cases loans have been made that the banks of the town would not make. In nearly every case the stock and bonds of the factory have been purchased out of a fund raised for that purpose.

What is your opinion of this method of procedure? Do you consider it right for a Chamber of Commerce to offer factories valuable special inducements to change their locations? Some of our members think that our Chamber of Commerce should adopt similar methods. I am not inclined to agree, but would like to know what you think about it.—M. E. B.

A factory is organized for the purpose of making goods to sell at a profit. Its object being profits, it should seek a location with an eye single to successful operation. There are many factors entering into successful operation, such as transportation, power, water, labor, accessibility to market and the like. Social and civic conditions as affecting the workingmen are most important. These and the like are the determining factors with those whose purpose it is to establish factories that will grow and prosper, and bonuses, loans, exemptions and stock subscriptions are fundamentally wrong if they form the sole inducement upon which the factory was secured.

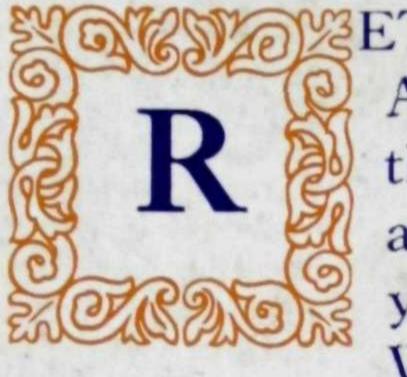
A factory that would waive advantageous conditions in one locality in order to get a bonus or sell stock in a community where it would be less advantageously located would not be serving the best interest of its stockholders, and a community that offers bonuses, exemptions, loans and subscriptions as the primary inducement for the location of factories, is benefitting neither the factories nor the public. A successful manufacturing establishment is an asset and an unsuccessful one a liability, and factories that determine their location solely on the strength of money offers from a community are not, as a rule, successful.

In our opinion every community seeking to secure factories should do so with an eye single to the financial success of the factory, and should discourage the location of any industry that would operate at a disadvantage.

An investigation should be made to determine conditions favorable and adverse to manufacturing enterprises. If adverse conditions are found the Chamber of Commerce should occupy itself with removing these, if they can be removed, and improving others, where they can be improved; but to offer financial assistance as the chief inducement for a factory to locate is artificial and unsound. It will never be the determining factor with an industry that really looks into the future, and a rivalry among cities to secure factories on this basis is unhealthy in the extreme.

The financing of an industry should be a banking and not a community proposition, and if banking facilities are inadequate the Chamber of Commerce can properly consider that as one of the removable disadvantages to factory growth and turn their attention to remedying the difficulty.

We make no criticism of funds raised to invest in the securities of factories, where the funds are properly safeguarded and their object is to assist factories to make profits for themselves as well as the subscribers. What we have said refers only to the giving of such funds as an inducement to factories to move away from the place where they are located into the town where the offer is made, and where, as is seemingly often the case, the securing of the factory rather than its successful operation prompts the offer.—Ed.



ETURNS from the formal announcement of the Annual Meeting of the Chamber of Commerce of the United States, sent out on October 31, indicate a large increase in attendance over that of last year, when one thousand business men gathered in Washington to discuss American commerce.

The 1917 program, now in preparation, provides for the presentation and discussion of the most important subjects with which American business is now confronted, both through addresses by men of national prominence, recognized experts in these subjects, and through the reports of committees of the Chamber which have been studying them during an extended period.

The annual report of the Board of Directors and the address of the President of the Chamber will be of peculiar interest because the past year has been the year of the greatest activity of the Chamber since its formation in 1912.

The number of subjects which must be presented at the Annual Meeting is so great that it will almost certainly be necessary to hold sessions in the morning, afternoon and evening of each day. The banquet will be held Friday evening.

Last year the demand for seats at the banquet was in excess of the seating capacity of the largest banquet hall in Washington and, anticipating an even larger attendance this year, application for seats at the banquet as well as for hotel accommodations should be made early.

The dates—Wednesday, Thursday and Friday, January 31, February 1 and 2, 1917. The place, Washington, D. C.

A Shopping Questio By STRICKLAND GILLILAN

Decorations by John Howard

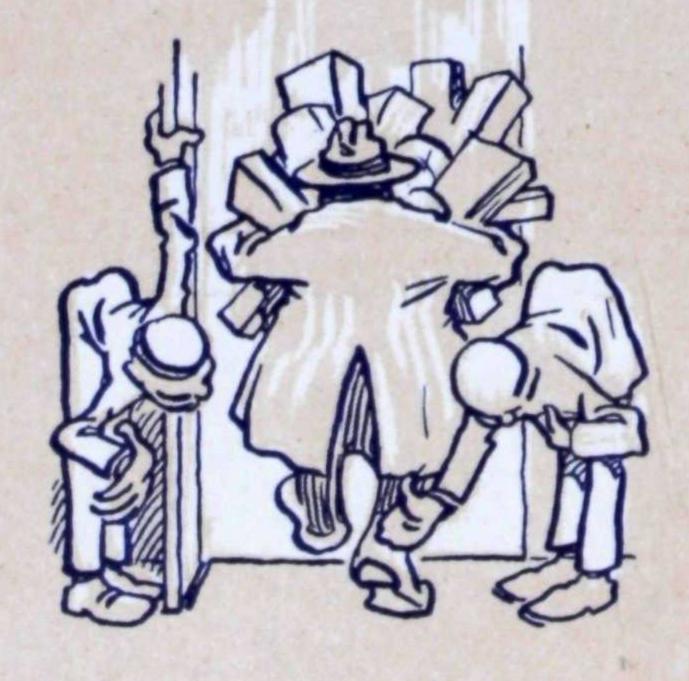
From habit long-established, we Ask only: "Do we like the shop? Have they been courteous to me? Shall I keep trading there, or stop!" When often we should rather say: "Do I act fairly when I buy? Are salesmen glad when I go 'way? What sort of customer am I?"



We stubbornly demand that all Who wait upon us in the "store" Shall in our presence prostrate fall And beat their heads upon the floor. They must be gentlemanly, or Most ladylike when we come by. Here's what we should be anxious for: "What sort of customer am I?"

We who are snobbish look upon Salespeople as a bit below Our social level. When we're gone The folks who served us often know The teeter tipped the other way— The lady sells, the rude ones buy! So ask this question day by day: "What sort of customer am I?"





A deal is not, as some folks deem, An act of charity in which The buyer aids a clever scheme To make the crafty seller rich. The honest trade serves both alike— The dealer and the ones who buy. Suppose all merchants went on strike! "WHAT SORT OF CUSTOMER AM I?"

Furthermore, I was hundreds of miles away from the farms of the Middle West, the source of our largest supply.

I was compelled, therefore, to be a specialist."

A specialist, he will explain, if one asks for enlightenment, is a man who thoroughly knows his business. Russell Smith Page, the father, never more himself than a local dealer in wool and hides of all kinds-bull, cow and steer-said to the son, the day he was twelve years old: "Here is a little room. The calfskins that come in after this belong to you. But you must pay for them, take care of them and sell them yourself to tanners."

The boy got a large caldron and filled it with salt and water. From that day to this (sixty-one years intervening) Carroll S. Page has been an expert. "I put the skins into the caldron with my own hands," he said, "and stretched them and dried them on boards. I left school when I was seventeen. I might have gone to college but my father thought I could do better in business."

For five years, between the ages of twelve and seventeen, Senator Page, under a plan of his father's devising, was educated mentally and manually. He is the president of two banks and a director of several important corporations. After service in the legislature of his State, he was elected Governor and then chosen to sit in the Senate as the successor of Redfield Proctor, whose specialty was marble. Would his career have been more honorable and useful if he had devoted all of his hours while at school to his books and neglected his kettle of calfskins?

WHAT a man has done once, so he thinks, he can do again and with a discount as to labor and a premium as to outcome. "All things have changed since you were a boy," the interviewer said, in the hope of stimulating and prolonging the dialogue.

"But not human nature," Senator Page rejoined vigorously. "And man is paramount now, as he always has been in the past. Conditions, let me remind you, are created by man. They don't occur automatically. Captain Hyde, one of my Revolutionary ancestors, was given land for his services as a soldier and surveyor. The Pages occupied it. I was born on it. My father, nearly incapacitated by an accident, required my help.

"Traditionally, therefore, and through necessity, I was rooted to that isolated and

one particular region. Were I a young man today, I would make calfskins my specialty and open a shop under

the eaves of the largest calfskin establishment in the country.

"I would go where business was being done on a large scale in the confident belief that I could do some business myself if I gave it my enthusiastic attention and thought out new methods. Corporations are invariably at a disadvantage, because the shareholders have lost personal touch with their property and depend on hired manager sand superinten-

dents.

"The small man starting now should start just as small men started forty years ago. He can not rush in and capture the market and ride to his work in a flying-machine or an automobile. If he is modest, confident and painstaking, however, has ideas, and will put on overalls when he is obliged to, his business will grow and the circle of his customers will enlarge from year to year. Presently he will be independent.

"Joseph Hecht, anciently my most active competitor, died a wealthy man. He walked around in New York with a bag on his shoulder, buying calfskins at small butcher shops. The youth of today

who is willing to begin that way will succeed, barring disasters that can not be seen in advance."

Live stock is being studied. So are trees and plants. Studied that there may be an improvement in quality and an increase in productiveness. Why not study man? Senator Page asks. Not the diseases of man, nor his pleasures, but his uses, if he has any.

A NOTHER of his inquiries is: "What are we going to do with the boys of our cities?" Then he adds: "And our girls?"

Sociologically, in his judgment, these two questions, constituting one subject, are the gravest by far calling for an answer from the American people.

"We are saving our mines, forests and quarries," he says, "but are wasting more human lives than anything else."

In what way? He has the facts ready to

be thrown into the faces of the incredulous. Every year 2,500,000 children are graduated from the elementary schools of the United States. An equal number leave school

at the age of fourteen or under, having gone no further than the sixth grade.

The boys, nearly three million in number, and thousands of the girls, obtain em-



He believes our boys and girls are as important as horses and potatoes, and that we should study them to discover their aptitudes.